Economic &
Planning Systems
Real Estate Economics
Regional Economics
Public Finance
Land Use Policy

DRAFT REPORT

MARKET ANALYSIS FOR WORKSPACE DEVELOPMENT IN COYOTE VALLEY

Prepared for:

City of San Jose

Prepared by:

Economic & Planning Systems, Inc.

August 2004

EPS #13159

BERKELEY
2501 Ninth St., Suite 200
Berkeley, CA 94710-2515
www.epsys.com
Phone: 510-841-9190
Fax: 510-841-9208

SACRAMENTO
Phone: 916-649-8010
Fax: 916-649-2070

DENVER
Phone: 303-623-3557
Fax: 303-623-9049

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

PAGE

LIST OF FIGURES AND TABLES

PAGE

I. INTRODUCTION AND SUMMARY OF FINDINGS

Economic & Planning Systems, Inc. (EPS) has been retained by the City of San Jose to provide a variety of economic consulting services in furtherance of the creation of the Coyote Valley Specific Plan. A key part of these services is the assessment of market conditions for residential, retail, and workspace development. This report presents EPS's findings regarding the current and future market prospects for the development of office, R&D, and industrial workspace at Coyote Valley.

BACKGROUND

Coyote Valley is an area comprised of over 7,000 acres of land in the southern part of San Jose and in unincorporated Santa Clara County but within San Jose's sphere of influence. Since the 1980s, San Jose's City Council has maintained a policy that reserves Coyote Valley for future urban development, and establishes goals for the overall development program for the area as well as "triggers" that must be met for the development to begin. Specifically, the policy has maintained that the overall plan for Coyote Valley must reserve over half of the overall acreage as a "greenbelt" on which no urban development can occur, and that the remainder of the land must be developed at sufficient density to accommodate 50,000 "qualifying" jobs (excluding retail and public or quasi-public jobs) and 25,000 housing units. In addition, a trigger has been established that none of the housing development can occur until at least 5,000 of the qualifying jobs are in place in Coyote Valley.

The Coyote Valley Specific Plan is being developed through the joint efforts of the City of San Jose and a multi-disciplinary group of consultants, including EPS.
This workspace market assessment is intended to provide information that will help this group of stakeholders to create the following:

1. A land use program that is supported by current and expected market conditions and meets the established goals for the development of Coyote Valley.

2. A financing program that distributes the benefits, costs, and risks of development among the various landowners.

3. An implementation strategy that efficiently phases and locates land use and infrastructure development to optimize the value of development to the landowners, developers, and the City of San Jose.

KEY FINDINGS

The following points summarize the most important findings of this report:

1. **The Coyote Valley Specific Plan should provide for a variety of workspace building typologies, ranging from low-rise industrial and R&D buildings to mid- and high-rise office buildings.** While workspaces generally may be growing more dense, much of the future job growth in Silicon Valley and San Jose will require workspace that is not more than a few stories tall.

2. **Software, computers, Internet services, and biosciences represent the strongest potential industries for tenanting workspace at Coyote Valley.** These industries are expected to grow rapidly, and will be attracted to Coyote Valley's envisioned amenities such as a mixed-use environment, natural features, and proximate housing.

3. **The development of sufficient workspace to accommodate 50,000 qualifying jobs at Coyote Valley is likely to occur over the next three to four decades, not by the year 2020.** Coyote Valley would need to capture an unrealistic 50 percent of all projected net new jobs in the City through 2020 to achieve the goal of 50,000 jobs in that time frame.

4. **The first 5,000 qualifying jobs at Coyote Valley are not likely to be achieved in the next few years, but should be achievable by the year 2012.** This finding has clear implications for the overall development of Coyote Valley, as the current policy directive would preclude housing development until the first 5,000 jobs are in place.

In addition to the findings above, those below provide the conclusions of each chapter of this report.

CHAPTER II: OVERVIEW OF ECONOMIC DYNAMICS

This overview of the Silicon Valley's economic dynamics suggests certain implications for the development of Coyote Valley.

1. **Coyote Valley will benefit substantially from its position in a strong regional economy.** The Silicon Valley is a worldwide leader in many growing technologies and industries, and is expected to continue to draw employers, employees, and investors that will spur real estate development.

2. **Despite recent job losses, the longer-term prospects for job growth in the Silicon Valley are very positive.** The Silicon Valley's workforce quality, economic and institutional infrastructure, quality of life, and brand name recognition will continue to attract investment and employment growth.

3. **The industries most likely to grow in the Silicon Valley region include software, computers, electronics, Internet services, and bioscience.** These industries can capitalize on the high-quality workforce available in the Silicon Valley, and Coyote Valley has an opportunity to capture some of the growth in these industries.

4. **Silicon Valley's employment base is moving away from industrial and traditional R&D space toward higher-density buildings, including multi-story office space.** The office supply is growing more rapidly than the supply of other workspace types, and companies seeking to maximize the value of their Silicon Valley operations are maintaining headquarters and "value-added" services here while locating their more land- and labor-intensive operations elsewhere.

5. **Real estate trends and company performances both suggest limitations on near-term opportunities for large campus-style workspace development for individual tenants**. Far fewer companies in the Silicon Valley are growing quickly than was the case several years ago. Also, real estate developers are increasingly aiming to limit their market exposure by developing incrementally rather than in large simultaneous projects. However, several established firms (Cisco, Xilinx, and IBM) that have property in Coyote Valley do present campus development opportunities.

6. **The provision of an attractive, mixed-use urban working environment should be prioritized at Coyote Valley.** These characteristics will give Coyote Valley a competitive edge over other potential employment locations, as employers and employees are seeking urban services and amenities, transit access, and proximity to housing. Such a plan will also help to address some serious regional issues regarding transportation, air quality, and housing supply.

CHAPTER III: WORKSPACE MARKET CONDITIONS

The downturn in the regional, national, and international economy has had a profound effect on the performance of workspace real estate in the Silicon Valley. Vacancy rates have risen, lease rates have fallen, absorption of workspace has been negative, and new construction activity has slowed to nearly none. The performances of different product types in different locations, however, are informative as to what might be expected or preferred at Coyote Valley. Some of the implications of this market conditions review are as follows:

1. **Office workspace development opportunities appear to be strongest.** Office development has outperformed R&D and industrial development in terms of vacancy rates, lease rates, absorption, and/or new construction during the past five years. These findings hold true for the Silicon Valley generally and for San Jose in particular.

2. **Urban-style office workspace should command premium values.** The performance of Downtown San Jose office space, relative to less urban environments, indicates that vacancy rates and lease rates are comparatively strong for office space in vital, mixed-use urban areas.

3. **For the next several years, R&D space is much more likely to be build-to-suit development than speculative development.** There currently is an estimated supply of nearly 40 million square feet of existing R&D space throughout the Silicon Valley being offered at very low lease rates.

4. **Industrial space appears to represent a less strong development opportunity.** While vacancy rates are relatively low, absorption and construction activity clearly indicate that the Silicon Valley and San Jose economies are shifting away from demand for manufacturing and warehouse space. However, growth in the bioscience industry in particular may provide continued demand for industrial space.

5. **Coyote Valley does not have a monopoly on available land in the City or region.** An adequate supply of land exists in San Jose to accommodate projected job growth and workspace development through 2020. While Coyote Valley clearly has the largest contiguous supply of such land, other properties in existing employment areas will compete for workspace development.

CHAPTER IV: COYOTE VALLEY'S COMPETITIVE POSITION

Coyote Valley has numerous qualities that will make it an attractive location for employers, but there are other potential employment locations that are competitive with or superior to Coyote Valley in certain respects.

1. **Coyote Valley faces significant competition for new development over the next several decades.** Several employment areas in San Jose offer advantages that Coyote Valley most likely never will, such as proximity to highways and the airport, or a critical mass of regionally prominent cultural and entertainment venues. These competitive areas also have vacant land available for future development, and are planned for intensification of existing properties as well.

2. **The availability and affordability of workspace in the competing areas will slow the construction of new workspace in Coyote Valley and elsewhere.** Significant amounts of office and R&D space are available in competitive locations, and for most companies these can be occupied more quickly and affordably than the development of new space at Coyote Valley.

3. **The corporations that currently own land in Coyote Valley are not planning to develop significant workspace in the near future.** Cisco, Xilinx, and IBM all own land in Coyote Valley, but only Xilinx has plans to commence even a small amount of workspace construction in the next several years.

4. **The other competing areas are beginning to incorporate the design features envisioned for Coyote Valley.** While most of the competing areas are developed with low-rise office, R&D, and industrial space, there is evidence of more intensive use of land, including taller buildings, structured parking, and mixed use. Also, transit-oriented development is envisioned and becoming a reality along the light rail line north of Downtown San Jose.

5. **To achieve the desired density of development, Coyote Valley will need to develop advantages that alternative areas may not provide.** Accessible and affordable housing, a vibrant mixed-use environment, attractive natural features and urban design, and convenient transit service will vastly improve Coyote Valley's competitive position.

CHAPTER V: COYOTE VALLEY ABSORPTION PROJECTIONS

Based on projections of overall demand for workspace in the competitive market area of San Jose and the attributes and liabilities of Coyote Valley versus alternative development locations, EPS has estimated the absorption of office, R&D, and industrial space through 2020.

1. **Coyote Valley can potentially capture roughly 1.5 million total square feet of workspace through 2010, and an additional 4.2 million square feet through 2020**. Office space (particularly mid- to high-rise space) represents the largest overall potential market niche for Coyote Valley. R&D/heavy office space represents a smaller niche, due to the large supply of existing and available R&D space.

2. **Demand for mid- to high-rise office space is the most likely to improve during the buildout of the Coyote Valley community**. These uses tend to benefit most from and be most compatible with the type of urban environment envisioned for Coyote Valley. Industrial/warehouse space will be least improved by those features, but very little of that space is envisioned.

3. **In the absence of an unexpectedly large campus office or R&D user, roughly 4,300 jobs can be gained at Coyote Valley by 2010, and an additional 14,500 total jobs by 2020, for an overall total of 18,800 jobs.** Clearly, this number does not reach the goal of 50,000 total jobs at Coyote Valley, so workspace development would be assumed to continue beyond 2020.

4. **The preliminary threshold of 5,000 jobs should be achievable by not later than 2012**. Under the current policy, achieving this 5,000-job threshold would allow for the development of residential and retail uses in Coyote Valley. This threshold may be reached sooner if a major campus user is attracted, but this is not expected.

5. **Workspace development in Coyote Valley is likely to require several decades to reach full build-out.** Coyote Valley would need to capture over 50 percent of projected demand for new office, R&D, and industrial/warehouse workspace in the entire City of San Jose to accommodate 50,000 workers by 2020.

CHAPTER VI: LAND USE PROGRAMMING RECOMMENDATIONS

Based on the findings of this market analysis, EPS makes the following recommendations for the workspace in the Coyote Valley Specific Plan:

1. **The Specific Plan should not be overly aggressive in its assumptions of workspace density.** While mid- to high-rise office development is likely to be increasingly marketable over time, the vast majority of both jobs and workspace now and in the future are likely to be located in low-rise buildings of not more than four stories.

2. **The Specific Plan should assume most of its high-density workspace within the urban core, allowing for low-rise development in the peripheral areas.** Most of the mid- to high-density office space should be primarily located in the urban core, while low-rise office and R&D space should be distributed throughout the plan, including along the transit line and adjacent to the hillsides. Industrial space should be planned with easy access to Highway 101.

3. **The Specific Plan should ensure the development of a mixed-use core with transit access, retail and services, and open space features.** This type of environment should command premium workspace rents, and is also necessary to attract any significant amount of high-density office development.

4. **The Specific Plan should not rely too heavily on the development of the urban core as a near-term "place-making" effort**. The uses in the urban core, including the workspace, the retail, and the housing, are all likely to be more marketable as the remainder of Coyote Valley is built out, rather than before.

CONTENT OF REPORT

Chapter I, this chapter, summarizes the findings of the workspace market assessment. **Chapter II** describes the economic dynamics of the Silicon Valley and the City of San Jose, including the changing economic structure and real estate trends as well as Silicon Valley's competitive position in an increasingly global economy. **Chapter III** discusses workspace market conditions in the Silicon Valley and the City of San Jose, including current and past vacancy and lease rates, absorption trends, and construction activity. **Chapter IV** assesses Coyote Valley's competitive position within the regional context, including a definition of its primary competitive market area and a comparison of Coyote Valley to other potential employment development locations. **Chapter V** presents projections for Coyote Valley's capture of the competitive market demand for office, R&D, and industrial space through 2020, as well as the number of jobs likely to be accommodated in that workspace development. **Chapter VI** discusses the implications of this market assessment on the Coyote Valley Specific Plan, including considerations of workspace product mix, locations, desired amenities, and phasing.

II. OVERVIEW OF REGIONAL ECONOMIC DYNAMICS

Coyote Valley is located on the southern edge of Silicon Valley, a region recognized worldwide as a leader in technological innovation and progressive corporate culture. This chapter discusses the economic evolution of Silicon Valley industries and real estate development patterns, as well as the positive and negative conditions that are expected to shape Silicon Valley's future economy.

SILICON VALLEY DEFINED

The term "Silicon Valley" refers to the physical area located between the Santa Cruz Mountains and the Diablo Range in the "South Bay" of the San Francisco Bay Area. The Silicon Valley's geographic boundaries are defined by the Silicon Valley Manufacturing Group (SVMG) as all of Santa Clara County and San Mateo County, as well as the southern Alameda County cities of Fremont, Newark, and Union City, and into the Santa Cruz County community of Scotts Valley. **Figure 2.1** on the following page shows Coyote Valley and the Silicon Valley area. San Jose is the largest city in the Silicon Valley and the Bay Area, and is now the third largest city in California.

Beyond its geographic contiguity, the defining characteristic of Silicon Valley is its interrelated industries and economic activities. The Silicon Valley is home to numerous headquarters for internationally prominent information technology companies such as IBM, Cisco, Apple, Hewlett Packard, Oracle, Sun Microsystems, and Intel. In addition, the region is home to many more small and/or "start-up" firms that are equally responsible for the region's entrepreneurial reputation. Credit is often given to the relationship between technology industries and the region's numerous universities, which produce students and faculty who engage in both institutional and private research and innovation.

ECONOMIC EVOLUTION IN SILICON VALLEY

Due to its size, the development of Coyote Valley is likely to occur over a period of several decades. A review of the historical changes in the Silicon Valley economy over a similar period of time is therefore informative. In addition, it is instructive to understand and evaluate the projections of industry and real estate experts regarding the future role of Silicon Valley in an increasingly global economy.

Figure 2.1:
Coyote Valley in Context

EMPLOYMENT SHIFTS

Silicon Valley's role in the regional, national, and international economy has evolved over the past several decades. The businesses that currently comprise the Silicon Valley's "driving industries" are not the same as those that formerly drove the economy, or those expected to drive the economy in the future.[1]

Driving Industries

Past

Historically, San Jose and the larger Silicon Valley economy have been hotbeds for technological innovation. Silicon Valley companies have often been at the forefront of changes and shifts in the global high-tech industry.

The Silicon Valley began to function as a recognizably integrated economy during the 1950s and 1960s. As in the present, the primary "driving industries" in the Silicon Valley were technology-related, but at that time were focused largely on defense electronics. Through the following decades, the economy of Silicon Valley shifted away from defense electronics toward commercial integrated circuits (1960s and 1970s), and then again to microprocessors and personal computers (1970s and 1980s).

In the 1990s, of course, much of Silicon Valley's economic activity focused on applications of the Internet. The explosive worldwide growth of this technology was reflected in the Silicon Valley's employment growth and rapid escalation of wages.

Present

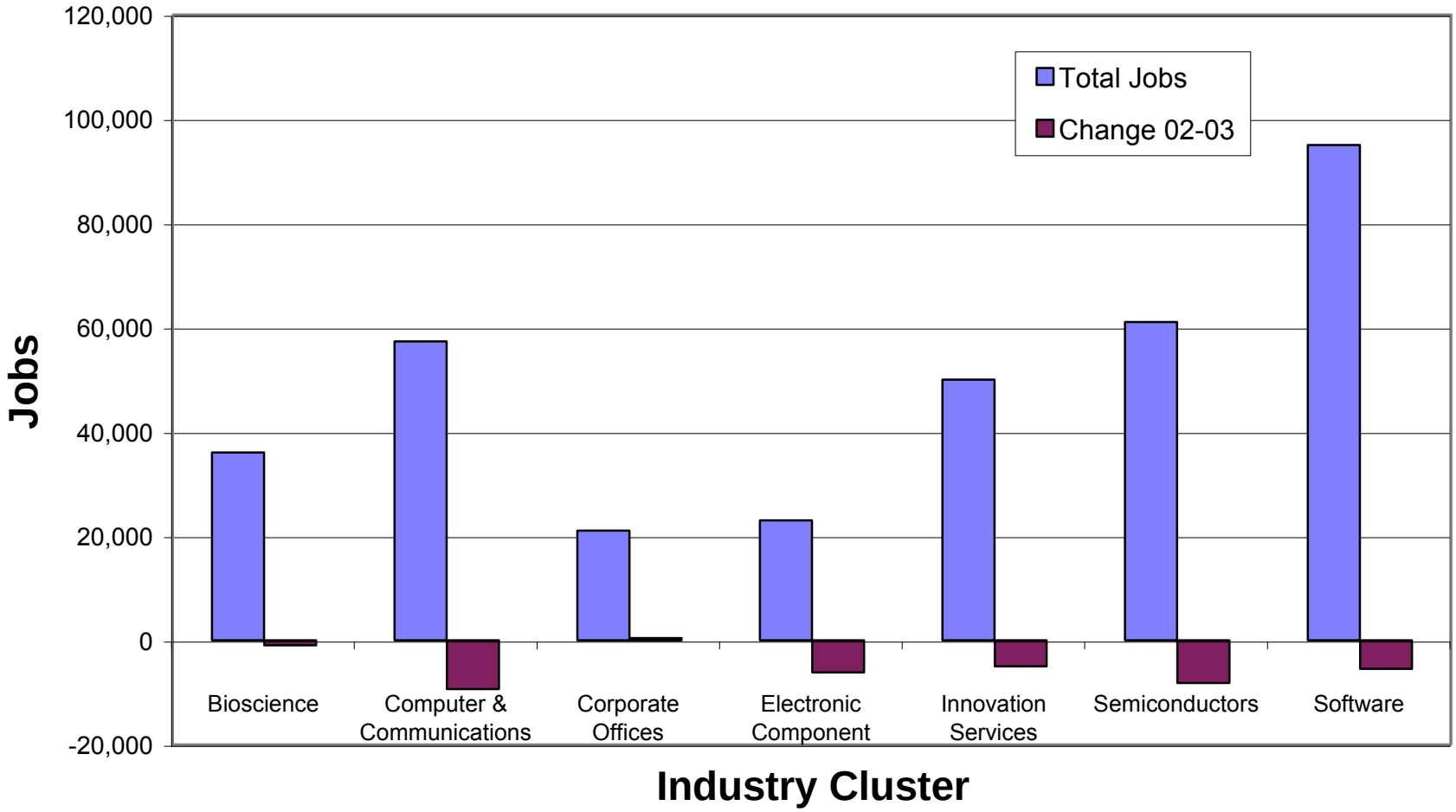
As in the past, the Silicon Valley economy continues to be driven by firms related to technology. As shown on **Figure 2.2**, the software industry represents the largest sector of the "driving industry" clusters, followed by the semiconductor industry and the computers and communications industry.

The Silicon Valley appears to be further cementing its role as a national leader in technology industries. According to Joint Venture: Silicon Valley Network, the Silicon Valley has larger than average concentrations of jobs in each of the seven industry clusters shown on **Figure 2.2**. Between 2001 and 2002, Silicon Valley's proportionate share of the nation's jobs in five of these clusters actually grew, with only software and corporate offices showing proportionate declines. Despite widespread concerns that

[1] A study commissioned by the City of San Jose and prepared by Strategic Economics, et al., identified "driving industries" as those that primarily sell their goods and services to customers beyond the local area, as opposed to industries that support local businesses (such as accountants or lawyers) or provide services to local households (such as retail).

Figure 2.2
San Jose 2003 Total Employment and Change in Employment from Previous Year

Source: California Employment Development Department; Joint Venture; Economic & Planning Systems, Inc.



Silicon Valley was losing significant numbers of jobs in its core industries to other parts of the country; this data indicates that Silicon Valley actually stayed comparatively healthy in these industries, relative to the nation.

Future

The Silicon Valley is poised to continue its economic growth in the coming years. By 2020, Bay Area's knowledge-industry cluster expected to employ nearly one out of every five people in region.

According to the U.S. Bureau of Labor Statistics, the industries that are expected to grow most rapidly nation-wide through 2012 include software publishers (ranked #1), computer systems design (ranked #4), and Internet services (ranked #9). Silicon Valley is internationally recognized as being the worldwide center for each of these industry sectors. The other industries expected to have most rapid growth include child care, elderly care, health care, and similar industries that support households or businesses rather than being significant "export" or "driving" industries for most regional economies.

Industry experts believe that companies in Silicon Valley have the opportunity to build upon their existing expertise in information technology to create new applications such as new uses of wireless network technology. Industry experts believe that this convergence of new technologies will not only create new industries, but will change the nature of how most companies operate, and how most people live and work. Experts suggest that the market potential of this coming technological convergence could top $1 trillion in roughly ten years.

In addition to these industry sectors in which Silicon Valley has already established its leadership, industry experts and prognosticators believe that the next global wave of technology to hit Silicon Valley will be a convergence of new technologies including:

- **bio-technology**,
- **information technology**, and
- **nanotechnology**.

Business opportunities that could grow out of these new technologies include:

- **bio-informatics**—processing of large amounts of complex biological data in product development,
- **bio-materials—**developing new applications for manufacturing and agriculture, and
- **bio-chips**—converging microelectronics and molecular biology to help diagnose illnesses.

The Bay Area and Silicon Valley have begun to emerge as a locus for these industries, with bioscience having a strong presence on the Peninsula (e.g., South San Francisco) and in the East Bay (e.g., Emeryville) as well as in San Jose, where there are plans underway for a bioscience incubator in addition to the bioscience firms already located there.

Another boost to the Silicon Valley economy may come from defense spending in the post-9-11 world. While the defense and aerospace industry sector has declined from 12 percent of all Silicon Valley workers in 1992 to only four percent in 2001,[2] the remaining employers in this industry, as well as other technology firms, still make products that are keystones in the nation's defense supplies.

Demographic Indicators

With each shift in the region's economy came demographic changes, and each subsequent shift showed Silicon Valley further differentiating itself from the rest of the Bay Area, state, and nation. **Table 2.1** shows that the Silicon Valley population (shown as the Counties of San Mateo and Santa Clara) grew by 47 percent between 1970 and 2000. This rate of growth was the same as in the nine-county Bay Area generally, and faster than the national average, although slower than California overall.

While the population was generally growing, it was also changing in character. **Table 2.2** shows that the Silicon Valley began the 1990s with higher per capita income levels, educational attainment, and percentage of foreign-born residents than in the Bay Area, California, or the United States overall. By 2000, the differences between the Silicon Valley and the larger areas had grown still more. These figures are illustrative of the fact that the Silicon Valley was attracting a unique labor force, and that labor force was realizing significantly greater incomes than in most of the country.

Today, despite the fact that the national economic downturn was strongly felt in the Silicon Valley, the Silicon Valley workforce continues to command extremely high wages. At the end of 2003, Santa Clara and San Mateo Counties were both in the top six nationally in terms of average weekly wage, with each being greater than 50 percent higher than the national average.[3] Moreover, the two counties also were in the nation's top six in terms of absolute growth in average employee wages over the previous year.

Job Growth/Decline

From 1992 through 2000, the Silicon Valley gained over 350,000 jobs,[4] increasing total employment from just over 1.0 million to nearly 1.4 million. As such, the total number of jobs in Silicon Valley increased by over 33 percent during the decade – far outpacing the 11 percent increase in the area's population during the decade. During this same

[2] Joint Venture "Building the Next Silicon Valley."

[3] Bureau of Labor Statistics "County Employment and Wages Summary,"

[4] Joint Venture's 2004 Index of Silicon Valley

Table 2.1
Population Trends, 1970 - 2000
Coyote Valley Market Analysis

Area	Population Count				Population Change			
	1970	*1980*	*1990*	*2000*	*70-80*	*80-90*	*90-00*	*70-00*
Silicon Valley	1,620,948	1,882,400	2,147,200	2,389,746	16%	14%	11%	47%
San Mateo County	*556,234*	*587,329*	*649,623*	*707,161*	*6%*	*11%*	*9%*	*27%*
Santa Clara County	*1,064,714*	*1,295,071*	*1,497,577*	*1,682,585*	*22%*	*16%*	*12%*	*58%*
Bay Area (9 Counties)	4,628,199	5,179,784	6,023,577	6,783,760	12%	16%	13%	47%
California	20,045,806	23,667,902	29,760,021	33,871,648	18%	26%	14%	69%
United States	204,000,665	226,545,805	248,709,873	281,421,906	11%	10%	13%	38%

Sources: ABAG; US Census; RAND California; Economic & Planning Systems, Inc.

Table 2.2
Selected Demographic Trends, 1990 - 2000
Coyote Valley Market Analysis

Category	1990	2000	% Change 90-00
Per Capita Income			
Silicon Valley	$21,030	$35,040	67%
San Mateo County	*$22,430*	*$40,383*	*80%*
Santa Clara County	*$20,423*	*$32,795*	*61%*
Bay Area	$19,716	$30,934	57%
California	$16,409	$22,711	38%
United States	$14,420	$21,587	50%
Educational Attainment (Bachelors'+)			
Silicon Valley	32%	40%	24%
San Mateo County	*31%*	*39%*	*25%*
Santa Clara County	*33%*	*40%*	*24%*
Bay Area	31%	37%	21%
California	23%	27%	14%
United States	20%	24%	20%
Foreign-Born			
Silicon Valley	24%	34%	41%
San Mateo County	*25%*	*32%*	*27%*
Santa Clara County	*23%*	*34%*	*47%*
Bay Area	20%	27%	37%
California	22%	26%	21%
United States	8%	11%	40%

Sources: ABAG; US Census; RAND California; Economic & Planning Systems, Inc.

period, average pay per employee increased by 60 percent in real terms (adjusted for inflation), from $50,000 per employee to over $80,000.[5] Clearly this period was one of tremendous growth in the Silicon Valley economy.

In the past several years, the total employment in the Silicon Valley has declined precipitously. In 2001, total employment in the Silicon Valley reached nearly 1.4 million. Within one year, it had fallen 10 percent, and fell another five percent in 2003, resulting in a net loss of over 200,000 jobs. These rapid job losses reversed the somewhat more incremental job gains of the 1990s, and in 2003 the region's employment count was essentially the same as it had been in 1996.

As shown on **Figure 2.2**, recent job losses were reported in every industry except corporate offices, and bioscience suffered only a small loss of jobs. The largest numbers of lost jobs were in the computer and semiconductor sectors – which are two of the Silicon Valley's three largest driving industries. Slightly lower but still significant job losses were also shown in the software sector, the region's largest industry.

In 2003 and the beginning of 2004, broad economic trends have been more positive. The stock market rebounded in 2003, and many economists predict still greater stock performance in 2004. The Gross Domestic Product continues to rise, with recent quarterly growth rates higher than any seen in several decades. Productivity has risen even faster, as the use of new technologies has enabled companies to produce more with fewer employees. After several quarters of productivity gains without employment gains, significant job growth was finally documented early in 2004, and is expected to continue throughout the year.

The Silicon Valley's economy also is expected to begin to bounce back in 2004, but employment will continue to grow at a slower pace than the national average through 2005. Employment growth will accelerate in 2005 and beyond, but **Table 2.3** shows that total employment in Silicon Valley is not expected to recover to its 2001 employment peak until after 2005. Some projections, such as those provided in the Silicon Valley Manufacturing Group's *Projections: 04*, claim that Silicon Valley employment will not return to its previous employment peak until 2010.

According to the Association of Bay Area Governments (ABAG), the Silicon Valley is expected to gain a total of 363,630 jobs between 2000 and 2020 (see **Table 2.3**). This represents a total employment increase of 18 percent, which is slightly below the Bay Area increase of 20 percent. San Jose's job growth rate, however, is expected to exceed the Bay Area average, at 21 percent (see **Table 2.4**). San Jose is also expected to experience the largest absolute increase in employment among all Bay Area cities – slightly larger than in San Francisco and more than double the third-place city of Oakland (see **Table 2.5**).

[5] Joint Venture's 2004 Index of Silicon Valley

Table 2.3
Bay Area Employment Projections
Coyote Valley Market Analysis

Area	Total Employment					Change 2000-2020	
	2000	*2005*	*2010*	*2015*	*2020*	*Number*	*Percent*
Silicon Valley	1,488,220	1,482,490	1,628,260	1,760,870	1,851,850	363,630	18%
San Mateo County	*395,890*	*396,630*	*429,100*	*461,670*	*489,020*	*93,130*	*17%*
Santa Clara County	*1,092,330*	*1,085,860*	*1,199,160*	*1,299,200*	*1,362,830*	*270,500*	*19%*
Remainder of Bay Area	2,265,450	2,366,380	2,571,410	2,748,970	2,900,740	635,290	21%
Total Bay Area	3,753,670	3,848,870	4,199,670	4,509,840	4,752,590	998,920	20%

Sources: ABAG Projections 2003; Economic & Planning Systems, Inc.

Table 2.4
Silicon Valley Employment Projections by City
Coyote Valley Market Analysis

Area	Total Employment					Change 2000-2020	
	2000	*2005*	*2010*	*2015*	*2020*	*Number*	*Percent*
San Jose	423,040	419,410	469,210	513,850	546,410	123,370	21%
Santa Clara	135,960	135,140	148,910	158,420	162,650	26,690	17%
Sunnyvale	112,920	112,240	122,150	130,590	135,800	22,880	16%
Milpitas	50,260	49,750	55,350	61,920	66,010	15,750	23%
Mountain View	77,330	77,170	84,730	89,010	92,570	15,240	15%
Cupertino	44,910	44,490	50,460	53,150	53,760	8,850	18%
Gilroy	17,270	16,230	18,580	23,220	24,780	7,510	34%
Morgan Hill	13,080	12,960	15,430	18,440	20,440	7,360	41%
Palo Alto	76,330	76,520	79,030	80,840	82,130	5,800	6%
Remainder of Santa Clara County	141,230	141,950	155,310	169,760	178,280	37,050	20%
Total Santa Clara County	**1,092,330**	**1,085,860**	**1,199,160**	**1,299,200**	**1,362,830**	**270,500**	**19%**
San Mateo	60,130	60,500	64,740	70,480	75,240	15,110	17%
Redwood City	60,940	61,460	67,410	70,100	72,670	11,730	15%
South San Francisco	53,190	53,530	56,980	60,310	62,350	9,160	13%
San Bruno	15,810	15,870	17,050	20,780	24,390	8,580	31%
Daly City	24,620	24,810	26,300	28,740	32,000	7,380	17%
Brisbane	8,100	8,130	9,510	11,620	14,010	5,910	43%
Menlo Park	29,200	29,370	31,990	33,690	34,960	5,760	15%
Remainder of San Mateo County	143,900	142,960	155,120	165,950	173,400	29,500	15%
Total San Mateo County	**395,890**	**396,630**	**429,100**	**461,670**	**489,020**	**93,130**	**17%**

Sources: ABAG Projections 2003; Economic & Planning Systems, Inc.

Table 2.5
Ranking of Bay Area Employment Projections by City
Coyote Valley Market Analysis

Area	Total Employment					Change 2000-2020		
	2000	*2005*	*2010*	*2015*	*2020*	*Number*	*Rank*	*Percent*
San Jose	*423,040*	*419,410*	*469,210*	*513,850*	*546,410*	*123,370*	*1*	*21%*
San Francisco	634,430	635,480	686,480	728,220	755,870	121,440	2	15%
Oakland	193,950	202,080	219,270	231,010	244,050	50,100	3	19%
Santa Rosa	100,050	110,330	121,110	130,650	139,780	39,730	4	31%
Fremont	108,410	115,700	124,400	133,740	144,330	35,920	5	23%
Santa Clara	135,960	135,140	148,910	158,420	162,650	26,690	6	17%
Sunnyvale	112,920	112,240	122,150	130,590	135,800	22,880	7	16%
Livermore	39,680	41,760	49,570	54,910	61,260	21,580	8	38%
San Ramon	38,120	42,120	48,880	53,880	58,870	20,750	9	41%
Hayward	86,600	91,230	97,620	101,420	105,420	18,820	10	17%
Pleasanton	53,430	55,870	64,780	70,010	71,720	18,290	11	31%
Milpitas	50,260	49,750	55,350	61,920	66,010	15,750	12	23%
Union City	18,680	21,480	25,560	29,950	34,320	15,640	13	60%
Alameda	27,160	30,360	36,830	39,670	42,610	15,450	14	46%
Mountain View	77,330	77,170	84,730	89,010	92,570	15,240	15	15%
San Mateo	60,130	60,500	64,740	70,480	75,240	15,110	16	17%

Sources: ABAG Projections 2003; Economic & Planning Systems, Inc.

Table 2.6 shows slightly different employment projections for the City of San Jose, as prepared in a report for the City's Office of Economic Development.[6] This table corroborates the claim that biosciences will account for a significant amount of future job growth in Silicon Valley. **Table 2.6** shows that the City of San Jose's employment in the bioscience industry is expected to increase by over 1,500 percent between 2000 and 2020, from a meager 917 jobs in 2000 to nearly 15,000 jobs in 2020. While the bioscience industry is expected to have the highest rate of growth, the software industry is expected to have the highest absolute growth in employment, with nearly 24,000 jobs added between 2000 and 2020, which also represents a doubling of the software employment in 2000. It is interesting to note that the "driving industries" collectively are expected to grow more rapidly than the "business serving industries" and the "household serving industries," and will therefore represent a higher proportion of total San Jose employment in 2020 than they did in 2000.

REAL ESTATE SHIFTS

The workspaces of Silicon Valley have evolved in concert with the shifting of driving industries. The trends seem to indicate an overall intensification of use, and a shift away from industrial buildings toward office and higher-level research and development (R&D) buildings.

Building Types

Many of the early Silicon Valley employers were highly productive manufacturers, and required industrial buildings with the capacity to build aerospace and defense equipment. Companies like Lockheed Martin were founded to serve military and government clients, and were frequently run by former military and government personnel, and as a result occupied buildings that were large and institutional in both function and aesthetic.[7]

As the driving industries moved toward the design and manufacture of circuits and computers, different building types were required, often with specialized equipment and space ("clean rooms," etc.) for R&D functions. These workspaces tended to be single-story buildings with a combination of labs, manufacturing areas, and office space. Because the developers of such buildings and often the tenants themselves were unsure of the activities and features that would be required over time, these buildings were built with flexibility in mind, and with only modest attention to external architecture.

[6] "Towards the Future: Jobs, Land Use, and Fiscal Issues in San Jose's Key Employment Areas 2000-2020," by Strategic Economics, et al.

[7] "Architectural Evolution," by Charles Dilworth, Kacey Clagett, and Stephen Koch, *Urban Land*, Sept. 2003

Table 2.6
Projected Employment by Industry, City of San Jose
Coyote Valley Market Analysis

Group/Industry	Total City Employment 2000	Projected Employment Increase 2000-2010 Number	2000-2010 % Increase	2011-2020 Number	2011-2020 % Increase	2000-2020 Number	2000-2020 % Increase	Total City Employment 2020
Driving Industries	**114,611**	**18,594**	**16%**	**31,745**	**24%**	**50,339**	**44%**	**164,950**
Bioscience	917	6,984	762%	6,984	88%	13,968	1523%	14,885
Computer & Communications	34,990	210	1%	3,601	10%	3,811	11%	38,801
Corporate Offices	4,725	99	2%	1,696	35%	1,795	38%	6,520
Electronic Component	14,714	179	1%	3,064	21%	3,243	22%	17,957
Innovation Services	15,468	45	0%	769	5%	814	5%	16,282
Semiconductors	23,083	110	0%	1,886	8%	1,996	9%	25,079
Software	20,714	10,926	53%	13,042	41%	23,968	116%	44,682
Visitor	4,727	41	1%	703	15%	744	16%	5,471
Business Support Industries	**136,969**	**16,152**	**12%**	**27,579**	**18%**	**43,731**	**32%**	**180,700**
Building/Construction/Real Estate	25,134	594	2%	1,014	4%	1,608	6%	26,742
Business Services	44,838	1,292	3%	2,206	5%	3,498	8%	48,336
Financial Services	8,709	4,424	51%	7,554	58%	11,978	138%	20,687
Industrial Supplies and Services	11,992	1,087	9%	1,856	14%	2,943	25%	14,935
Misc. Manufacturing	7,504	2,380	32%	4,064	41%	6,444	86%	13,948
Consumer Services	1,007	3,110	309%	5,310	129%	8,420	836%	9,427
Transportation/Distribution	37,785	3,265	9%	5,575	14%	8,840	23%	46,625
Household Supporting Industries	**124,306**	**17,343**	**14%**	**29,608**	**21%**	**46,951**	**38%**	**171,257**
Civic	34,395	7,285	21%	12,437	30%	19,722	57%	54,117
Health Care	18,939	2,219	12%	3,789	18%	6,008	32%	24,947
Retail	70,972	7,839	11%	13,382	17%	21,221	30%	92,193
Total	**375,886**	**52,089**	**14%**	**88,932**	**21%**	**141,021**	**38%**	**516,907**

Sources: Strategic Economics, et al; Economic & Planning Systems, Inc.

More recently, the Silicon Valley economy has shifted away from traditional R&D and manufacturing functions toward still higher knowledge-based functions that can be located in more traditional office structures. Many employers, including many in the software industry (the Silicon Valley's largest current driving industry), require space for individual and collaborative work on computers, but not necessarily spaces for product assembly, inventory storage, and other functions that formerly required large buildings with truck access.

A review of recent construction activity verifies these workspace shifts. As shown on **Figure 2.3**, the Silicon Valley currently has twice as much R&D space as office or manufacturing space. However, over the past five years, new development has represented a much higher proportionate increase to the office inventory (18 percent) than to the R&D inventory (10 percent), and the manufacturing and warehousing inventories barely increased at all. Moreover, only office space has had a net positive absorption in the five-year period, as more employers moved out of R&D and industrial product types than moved in. These figures suggest that office is becoming an increasingly large proportion of the Silicon Valley's workspace inventory.

Building and Site Configurations and Amenities

Compared to those of the past, the Silicon Valley's workspace needs of today and the future will be based on a business model with fewer material inputs, and less land and building square footage required per employee. Office employers typically require roughly 300 square feet per employee, compared to 350 for R&D space and 500 for warehouse and manufacturing space. To the extent that employment shifts toward office work, Silicon Valley's workers will require less space.

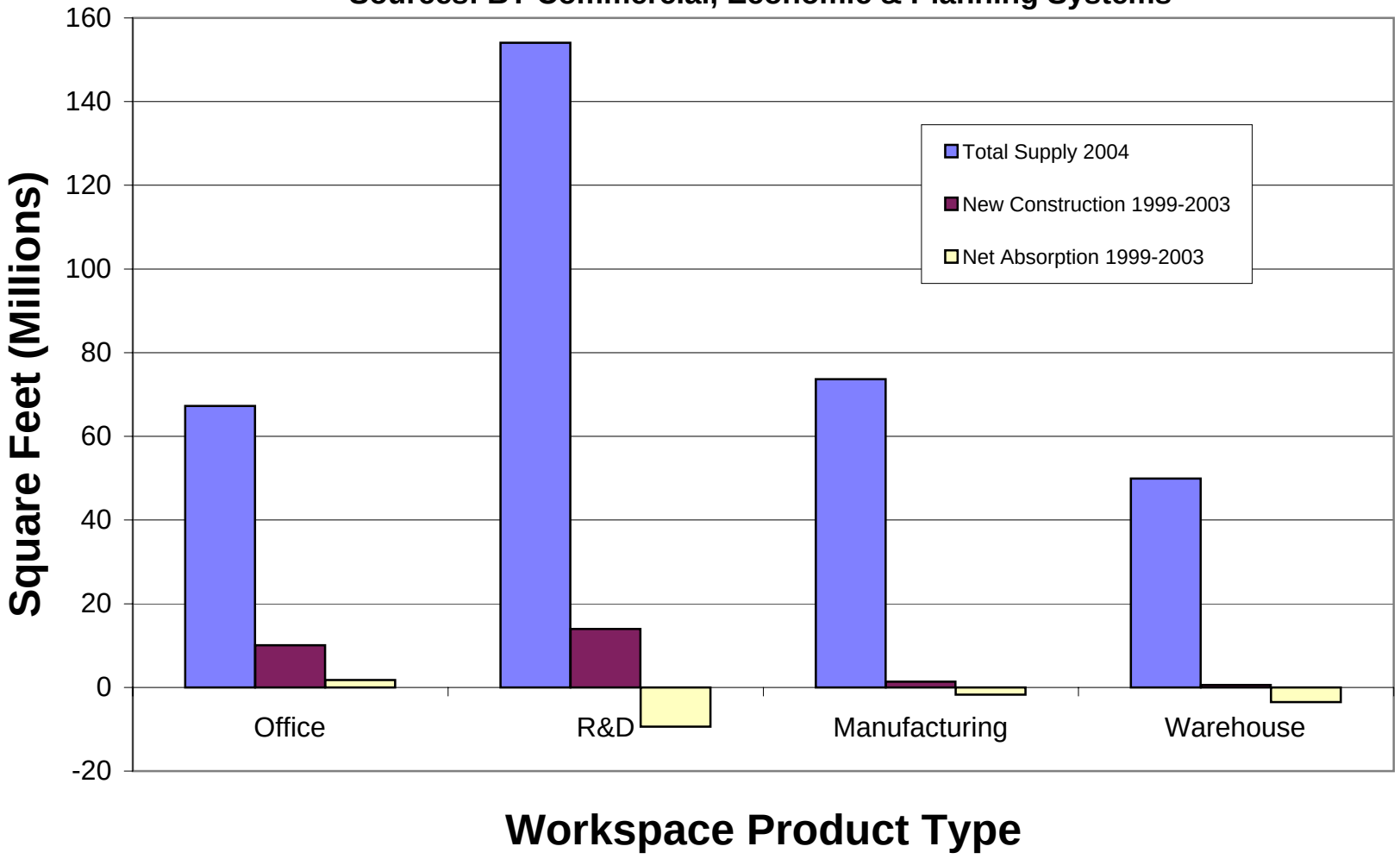
Moreover, increases in operational efficiency as well as desirable cost savings in the comparatively expensive Silicon Valley real estate market will cause employers to further intensify the use of their facilities. The City of San Jose's Economic Development Department predicts that office workers will require only 250 square feet per employee in the next decade, compared to 300 square feet per employee currently. R&D facilities will also be more intensively utilized, decreasing from 350 to 300 square feet per employee.

In addition to these more efficient workspaces, many driving industry companies are interested in keeping only the highest-value activities in Silicon Valley, due to the high real estate costs, wages, and other expenses associated with operating in the Silicon Valley. These employers are creating more multi-level workspaces and increasing the floor area ratios of their buildings.

While the workspaces of the present and future are becoming more densely populated, they also are moving toward more urban forms. Whereas workspaces in the 1980s started building fitness centers and cafeterias into their facilities as amenities to workers, workspaces today are frequently integrating these features outdoors, creating a more enjoyable opportunity for recreation for workers. And while most workspaces of the

Figure 2.3
Silicon Valley Real Estate Trends, 1999-2004

Sources: BT Commercial, Economic & Planning Systems



recent past were only a few stories in height—including those built as multi-building corporate campuses—current trends suggest that taller buildings are becoming more popular. These taller buildings can save on land costs, establish a more unique and visible corporate identity, and may also be more developable in places like Downtown San Jose that provide transit access.

Tenant Attributes

While the Silicon Valley has many large and well-known employers, the majority of employment is in smaller firms, even among the driving industries. This is likely to continue to be the case for the foreseeable future.

Software and start-up companies in Silicon Valley tend to be fairly small (average of 17 employees) and do not require large spaces. Among more than 7,300 technology-related firms in the Silicon Valley, the average number of employees is less than 50. At this number of employees, the average technology firm would require less than 20,000 square feet of space, which could be accommodated on less than one floor of a typical mid- to high-rise building.

In addition, the Silicon Valley's publicly traded companies have cooled considerably in recent years. In 1996, there were 37 "gazelle" companies in Silicon Valley—publicly traded companies whose revenues had increased by at least 20 percent for each of the previous four years. The number of gazelles actually fell during the dot-com boom to 27 in 2000. By 2003, there were only nine gazelle companies in the Silicon Valley. These disappearing gazelles arguably represent the greatest opportunities for large campus-style workspace development, as they may be rich with investor capital and project significant expansion of their workforce.

Developers and occupants of Silicon Valley workspace have learned some valuable lessons in the recent boom and bust cycle. Among these are the importance of 1) building divisible space, whether in a single building or multiple buildings; 2) constructing buildings that are flexible enough for a series of tenants over time, rather than only one specific tenant's needs; and 3) building incrementally and limiting the amount of "overbuilding," so that the success of a specific tenant's business plan does not determine the success of the real estate project.

Locational Attributes

The workplaces of Silicon Valley's future are shifting from campuses to smaller, denser, and more innovative workspaces. Buildings with these attributes can be located in urban areas that provide a variety of activities during and following the workday. New workspaces will integrate multiple uses including more restaurants, support services, and amenities into or near work areas. Also, to offset transportation problems with increased densities, an increasing number of employers and denser workspaces are locating near mass transit services and within close proximity to housing affordable to their workers.

While this shift toward urbanization is noticeable, there is still a large market for more traditional suburban-style workspace developments. Freeway access remains a key attribute for employment locations, and many employers and developers may shy away from the added expenses of urban locations, such as structured parking, more costly building types, and higher-valued land.

SILICON VALLEY'S COMPETITIVE POSITION

There are numerous attributes of Silicon Valley that make it a highly competitive location for corporate locations, population growth, and capital investment. However, there are also several conditions that do or can limit the region's growth potential.

ASSETS

Name Brand Recognition

"Silicon Valley" is a place and a concept that is recognized and emulated throughout the world. Numerous other regions have aimed to capitalize on its meaning, as the "Silicon Valley of the South" or the "Silicon Valley of the East." But the true Silicon Valley—home to over 7,300 technology companies employing over 300,000 workers—offers brand name panache that attracts employers, employees, and investors from around the globe.

Workforce Quality

Silicon Valley is known to attract the "best and the brightest" individuals from around the world. As noted above, 40 percent of residents in Silicon Valley have a bachelor's degree or higher. This includes not only a significant number of highly skilled immigrants working as entrepreneurs and in the high-tech industry, but also a large number of workers educated in Bay Area institutions as well as American workers relocating from other regions. The high workforce quality pays dividends that attract employers; "value added per employee"—a proxy for productivity—is roughly twice as high in the Silicon Valley as in the nation generally.[8]

Economic and Institutional Infrastructure

The Silicon Valley is home to many of the world's leading corporations for technology, including IBM, Cisco, Apple, Hewlett Packard, Oracle, Sun Microsystems, and Intel. The Bay Area also offers several nationally and internationally prominent educational and research institutions, including UC Berkeley, Stanford, UC San Francisco, and San Jose State. Due largely to the presence of these leading entities, the Silicon Valley attracts and produces much of the leading consumer technology, whether from the large firms and institutions themselves or from associated start-up firms.

[8] Joint Venture's 2004 Index of Silicon Valley

Access to Capital

Venture capital investment in Silicon Valley reached an unprecedented peak of $35 billion in 2000, more than in the previous seven years combined. Due to the "dot-com bust" and economic downturn, venture capital investment has fallen to just over $5 billion in 2003. While this represents a precipitous drop, it is interesting to note that the current level of venture capital investment still significantly exceeds any level achieved from 1993 through 1998, during the run-up to the dot-com boom. According to the City's Economic Development Strategy, one-third of all venture capital in the United States is invested in the Silicon Valley area.

While the software industry continues to be the largest recipient of venture capital, the biotechnology and medical device industries are showing the greatest increases in venture capital received, indicating a shift toward those industries for future growth.[9] Venture capitalists are now shifting away from the Networking and Equipment and IT Services Companies, and investing instead in Software, the largest funded industry, and Medical Device and Equipment companies and Biotechnology companies.

Quality of Life

Temperate weather, attractive and accessible natural features, extensive cultural activities, an ethnically diverse population, and a generally progressive political climate have made the Bay Area a major destination for tourists, residents, and employers for several decades.

CONCERNS

Vulnerability to Economic Cycles

After several years of tremendous growth, the national and international economy entered a downturn in 2001, characterized by corporate bankruptcies, job losses, and stock devaluation. This recessionary period was felt worldwide, but was particularly noticeable in the Bay Area and Silicon Valley, due to the region's high concentration of companies, employees, and investments in high-technology and Internet activities. While Silicon Valley is certainly not the only region in the nation or world susceptible to economic cycles, the very factor that makes Silicon Valley such a powerful international economic engine – its concentration of high-technology firms – also makes the region vulnerable to a downturn in those firms, whereas a more diversified economy may be less susceptible to downturns in particular industries.

Global Competition

The world's economy is increasingly interdependent across regional and national borders. Companies in the Bay Area and Silicon Valley have been leaders in the push toward globalization. Long-standing Silicon Valley companies such as Hewlett-Packard

[9] Joint Venture's 2004 Index of Silicon Valley

have touted globalization of production as a proven means of both cutting costs and producing high-quality goods and services. Much of the corporate talent employed in Silicon Valley is foreign-born, especially from Asian countries. Increasingly, those skilled workers are educated abroad rather than in the United States, and skilled labor markets are opening up in countries with much lower labor costs and other costs of doing business.

To the extent that other regions, domestic or international, can compete with or outperform Silicon Valley on price and quality for its traditional products, Silicon Valley will need to focus on alternative industries and/or an alternative role in the supply chain. Silicon Valley now competes not only with Boston and Washington D.C. for corporate growth and investment, but with cheaper alternatives at home and abroad, including Austin, Texas and Bangalore, India. Due to the increasing competition in the global marketplace, Silicon Valley must provide a unique environment that fosters innovation and entrepreneurship, and continue to act as a hub where intellectual, technological, and financial capital all converge.

Housing Supply and Affordability

Housing supply and affordability must continue to be increased in Silicon Valley in order for it to remain an attractive and profitable location for talented people and companies to locate. A recent study by UC Berkeley Professor John Landis reveals that within a 30-minute commute area, only 52,083 new homes are likely to be built in Silicon Valley by 2020; the demand will be for 213,646 units. This shortage provides an ideal opportunity to build housing in Coyote Valley to meet some of this demand in a location close to Silicon Valley's employment center. In addition, Silicon Valley remains one of the least affordable places to live in the nation. According to the California Association of Realtors, only 14 percent of Bay Area households could afford to buy the median-priced home in May 2004; nationally, 55 percent of households could afford a median-priced home in their community.

Traffic Congestion and Air Quality

Traffic congestion and commute times have improved over the past few years since Silicon Valley lost nearly 200,000 jobs from the dot-com bust. In addition, the construction of several freeway lanes helped to ease traffic congestion in the short term. In the long term, however, job growth will return to the region and further exacerbate traffic congestion and air quality issues. The Santa Clara Valley Transportation Authority estimates that the number of people commuting to Santa Clara County from Merced, Monterey, San Benito, San Joaquin, Santa Cruz and Stanislaus counties could double in the coming decades. This represents a significant increase of commuters on already congested freeways (Highways 101, 152, 156, and 25 and Interstates 680, 580, and 880).

This increase in long-distance commuters has a negative impact on the quality of the region overall. Long-distance commuting has been blamed for undermining civic engagement, reducing economic productivity, increasing the cost of maintaining the

state's highway system, and increasing global warming. In addition to long-distance commuters, lack of an efficient transportation infrastructure adds to the number of short and long-distance commutes. Sprawling development patterns have led to difficulties in developing an effective transit system. Future residential and office development patterns that encourage transit-oriented developments (TODs), higher-density and more vertical infill developments, can positively impact Silicon Valley's commuting patterns and air quality.

Cost of Doing Business

The State of California has emerged as one of the most expensive places to do business in the country, in large part due to a high cost of living and escalating workers' compensation costs. Silicon Valley is one of California's most expensive places to conduct business due to workers' compensation costs, escalating health care costs, and expenses related to employee recruitment and retention. In addition, California is the only state where overtime pay is effective at 8 hours per day, rather than 40 hours per week, which increases the cost of doing business.

A 2003 study by Forbes Magazine ranked Silicon Valley 96th out of 150 of the nation's largest metropolitan areas to conduct business and have a career. San Jose ranked very low in housing affordability (145th), job growth (144th), and cost of doing business (134th). If Silicon Valley continues to be perceived as a costly place to conduct business, the region will continue to lose out to areas perceived to be more business- and worker-friendly, whether in the United States or abroad.

IMPLICATIONS FOR THE COYOTE VALLEY SPECIFIC PLAN

This overview of the Silicon Valley's economic dynamics suggests certain implications for the development of Coyote Valley, including the following:

1. **Coyote Valley will benefit substantially from its position in a strong regional economy.** The Silicon Valley is a worldwide leader in many growing technologies and industries, and is expected to continue to draw employers, employees, and investors that will spur real estate development.

2. **Despite recent job losses, the longer-term prospects for job growth in the Silicon Valley are very positive.** The Silicon Valley's workforce quality, economic and institutional infrastructure, quality of life, and brand name recognition will continue to attract investment and employment growth.

3. **The industries most likely to grow in the Silicon Valley region include software, computers, electronics, Internet services, and bioscience.** These industries can capitalize on the high-quality workforce available in the Silicon Valley, and Coyote Valley has an opportunity to capture some of the growth in these industries.

4. **Silicon Valley's employment base is moving away from industrial and traditional R&D space toward higher-density buildings, including multi-story office space.** The office supply is growing more rapidly than the supply of other workspace types, and companies seeking to maximize the value of their Silicon Valley operations are maintaining headquarters and "value-added" services here while locating their more land- and labor-intensive operations elsewhere.

5. **Real estate trends and company performances both suggest limitations on near-term opportunities for large campus-style workspace development for individual tenants**. Far fewer companies in the Silicon Valley are growing quickly than was the case several years ago. Also, real estate developers are increasingly aiming to limit their market exposure by developing incrementally rather than in large simultaneous projects. However, several established firms (Cisco, Xilinx, and IBM) that have property in Coyote Valley do present campus development opportunities.

6. **The provision of an attractive, mixed-use urban working environment should be prioritized at Coyote Valley.** These characteristics will give Coyote Valley a competitive edge over other potential employment locations, as employers and employees are seeking urban services and amenities, transit access, and proximity to housing. Such a plan will also help to address some serious regional issues regarding transportation, air quality, and housing supply.

III. WORKSPACE MARKET CONDITIONS

The Silicon Valley economy has been in a "down" period for the last several years, with significant job losses and business failures. These trends have had a significant impact on the real estate market, as vacancies have skyrocketed and lease rates have fallen for office, R&D, and industrial workspace.

SILICON VALLEY OVERALL

VACANT SPACE

In 2000, the Silicon Valley had exceptionally low vacancy rates for all types of workspace. The overall availability rate for office, industrial, and R&D products was roughly 4 percent. By 2001, the overall availability rate had climbed to 16 percent, and continued to grow, reaching a high point of over 21 percent in 2003 (see **Table 3.1**). Colliers International reports that this availability rate was the highest ever recorded for the Silicon Valley. In sum, over 66 million square feet of workspace were available at year-end 2003.

The economic downturn has been comparably felt in the office and R&D real estate sectors. Office space started at less than four percent vacancy in 2000, and rose to over 18 percent by 2003. At year-end 2003, there was 13.3 million square feet of existing office space available for lease in the Silicon Valley.

R&D space had less than four percent vacancy in 2000, but rose to nearly 25 percent by 2003. The Silicon Valley's R&D market is significantly larger than its more traditional office market, and the 25 percent availability rate represented 39.4 million square feet of R&D space.

The vacancy increases in industrial and warehouse space were slightly less dramatic, but still severe. Warehouse vacancies rose from 4 percent in 2000 to 18 percent in 2003, and industrial vacancies rose from four percent to 12 percent. At year-end 2003, there were 6.6 million square feet of available industrial space, and an additional 7.1 million square feet of available warehouse space.

LEASE RATES

As vacancies have risen, lease rates have dropped significantly. In 1999 and 2000, Colliers reports that workspace rents were "the highest in the world," but by 2003, rents had fallen back to where they had been in 1990. As shown on **Table 3.1**, R&D rents reached higher than $4.00 per square foot per month in 2000, but had fallen to only $0.87 per square foot by the end of 2003. Office rents had a similar decline, falling from $6.54

Table 3.1
Silicon Valley Real Estate Market Vacancy and Lease Rates, 2000 - 2003
Coyote Valley Market Analysis

	Office		R&D		Industrial		Warehouse		All Workspace	
Year	Vacancy	Lease Rates	Vacancy	Lease Rates	Vacancy	Lease Rates	Vacancy	Lease Rates	Vacancy	Lease Rates
2000	3.5%	$6.54	4.0%	$4.10	3.9%	$1.57	4.4%	$0.77	4.4%	N/A
2001	13.7%	$3.23	17.3%	$1.50	10.1%	$1.15	12.6%	$0.64	16.0%	N/A
2002	16.8%	$2.55	22.3%	$1.10	11.3%	$0.85	16.7%	$0.37	19.8%	N/A
2003	18.3%	$2.16	24.7%	$0.87	11.7%	$0.55	18.1%	$0.38	21.2%	N/A

*Some figures are estimates based on bar chart graphics.

Source: BT Commercial; Colliers International; Economic & Planning Systems, Inc.

in 2000 to $2.16 in 2003. Industrial rents peaked at nearly $1.70 at the beginning of 2001, but fell to less than $0.70 by 2003. Warehouse rents also fell by more than 50 percent during this period, from $0.77 to $0.38 per square foot.

ABSORPTION

Falling lease rates have done little to stem the tide of increased vacancies. As a result, net absorption of workspace has been negative for several years. In 2000, over 22 million square feet of workspace were newly occupied (see **Table 3.2**). Each year since, absorption has been negative, including a major reversal in 2001 (27 million square feet of workspace were abandoned), and continuing losses through 2003. For the five-year period, there has been an aggregate negative absorption of nearly 13 million square feet of workspace, despite very strong absorption in the first two years.

The reversal of R&D absorption has been most dramatic. In 1999 and 2000, roughly 18.7 million square feet of R&D space were absorbed. Over the next three years, over 28 million square feet of negative R&D absorption were experienced, resulting in a five-year net negative absorption of over 9.3 million square feet. Warehouse space also had a net negative absorption of 3.5 million square feet for the five-year period, and industrial space had a net negative absorption of 1.7 million square feet. Office space actually had positive absorption for the five-year period with an amount of 1.7 million square feet, but the development of new space during this downturn increased the overall vacancy rates for office products as well.

CONSTRUCTION ACTIVITY

After several years of major expansions in the Silicon Valley's supply of workspace, new construction has fallen to relatively negligible amounts. In 1999, a total of 6.6 million square feet of new workspace were constructed in the Silicon Valley (see **Table 3.2**). In 2000, an additional 14.4 million square feet were constructed, resulting in a two-year total of over 21 million square feet. Over the following three years combined, less than 5 million square feet of workspace were developed; as job losses mounted, vacancy rates rose and lease rates fell.

The R&D market had the greatest absolute increase in supply during the five-year period, with nearly 14 million square feet of new R&D space developed. However, over 80 percent of that new space was developed in 1999 and 2000, and new construction since 2001 has been negligible. The office market showed a similar trend, with over 10 million total square feet of new office space being developed during the five year period, over 80 percent of which was built in 1999 and 2000. Office space also had the largest proportionate increase in supply, growing by 18 percent over the five-year period, compared to 10 percent for R&D space. Industrial space increased only marginally

Table 3.2
Silicon Valley Real Estate Market Absorption and Construction, 1999 - 2003
Coyote Valley Market Analysis

Year	Office		R&D		Manufacturing		Warehouse		All Workspace	
	Net Absorption (SF)	New Construction (SF)	Net Absorption (SF)	New Construction (SF)	Net Absorption (SF)	New Construction (SF)	Net Absorption (SF)	New Construction (SF)	Net Absorption (SF)	New Construction (SF)
1999	2,799,446	1,803,078	5,862,335	4,078,233	859,982	704,167	254,152	62,400	9,775,915	6,647,878
2000	6,937,927	6,547,105	12,887,204	7,392,447	1,708,363	421,921	911,661	85,398	22,445,155	14,446,871
2001	-5,482,491	1,108,350	-15,178,802	1,913,881	-3,641,834	193,718	-3,227,178	408,223	-27,530,305	3,624,172
2002	-1,855,952	239,843	-8,970,073	603,291	-703,098	42,387	-418,121	40,000	-11,947,244	925,521
2003	-656,896	381,000	-3,980,086	0	36,530	0	-1,041,927	0	-5,642,379	381,000
Five-Year Totals	*1,742,034*	*10,079,376*	*-9,379,422*	*13,987,852*	*-1,740,057*	*1,362,193*	*-3,521,413*	*596,021*	*-12,898,858*	*26,025,442*
Year-End 2003 Total Supply		65,295,667		154,445,962		72,877,980		49,908,958		342,528,567
Five-Year Increase to Supply		18%		10%		2%		1%		8%

Sources: BT Commercial; Economic & Planning Systems, Inc.

during the five-year period, with only 1.4 million square feet of space added to the 70 million-square foot total supply. Warehouse space also had only a minor addition to the built supply, with less than 600,000 square feet added to the 50-million square foot base.

SAN JOSE MARKET CONDITIONS

While Coyote Valley will compete regionally and even super-regionally for the attraction of workspace development, the performance of Coyote Valley workspace real estate will reflect the market conditions of its more immediate environment, As such, it is informative to compare San Jose's real estate market indicators in comparison to Silicon Valley's overall.

OFFICE

The San Jose office market has paralleled the performance of the overall Silicon Valley office market in terms of vacancies and lease rates, but has outperformed the broader market in terms of absorption and capture of new construction. For this discussion, "office" space includes both single-tenant and multi-tenant space that is used for standard office functions and has typical office configurations (offices, cubicles, etc.), as opposed to facilities that may have lab space, exceptional structures for bearing massive computer systems, or other features that would more appropriately be considered R&D/"heavy office" or "industrial" buildings.

Vacant Space

As shown on **Figure 3.1**, the vacancy rates among office space in Downtown San Jose and the remainder of San Jose have tracked closely with those in Silicon Valley, dipping below five percent in 2000 and then rising in subsequent years. Interestingly, Downtown San Jose's vacancy rate fell to less than 2 percent in 2000, and has remained lower than elsewhere in San Jose and in Silicon Valley generally. There currently are an estimated 1.4 million square feet of office vacancy in Downtown San Jose, and an additional 2.1 million square feet of vacant office space elsewhere in San Jose.

Lease Rates

Figure 3.2 shows that, like vacancy rates, lease rates in San Jose have been consistent with those throughout the Silicon Valley. In 2000, San Jose's lease rates fell slightly below those in the wider regional market, but both before and after that year, San Jose's lease rates were very similar to the average throughout the Silicon Valley. It also appears that Downtown San Jose has commanded slightly higher lease rates than the remainder of San Jose and the Silicon Valley generally over the past few years.

Figure 3.1
Comparison of Office Vacancy Rates, 1999-2003

(1) Central Silicon Valley includes non-Downtown San Jose, plus Sunnyvale and Santa Clara
Source: BT Commercial; Economic & Planning Systems

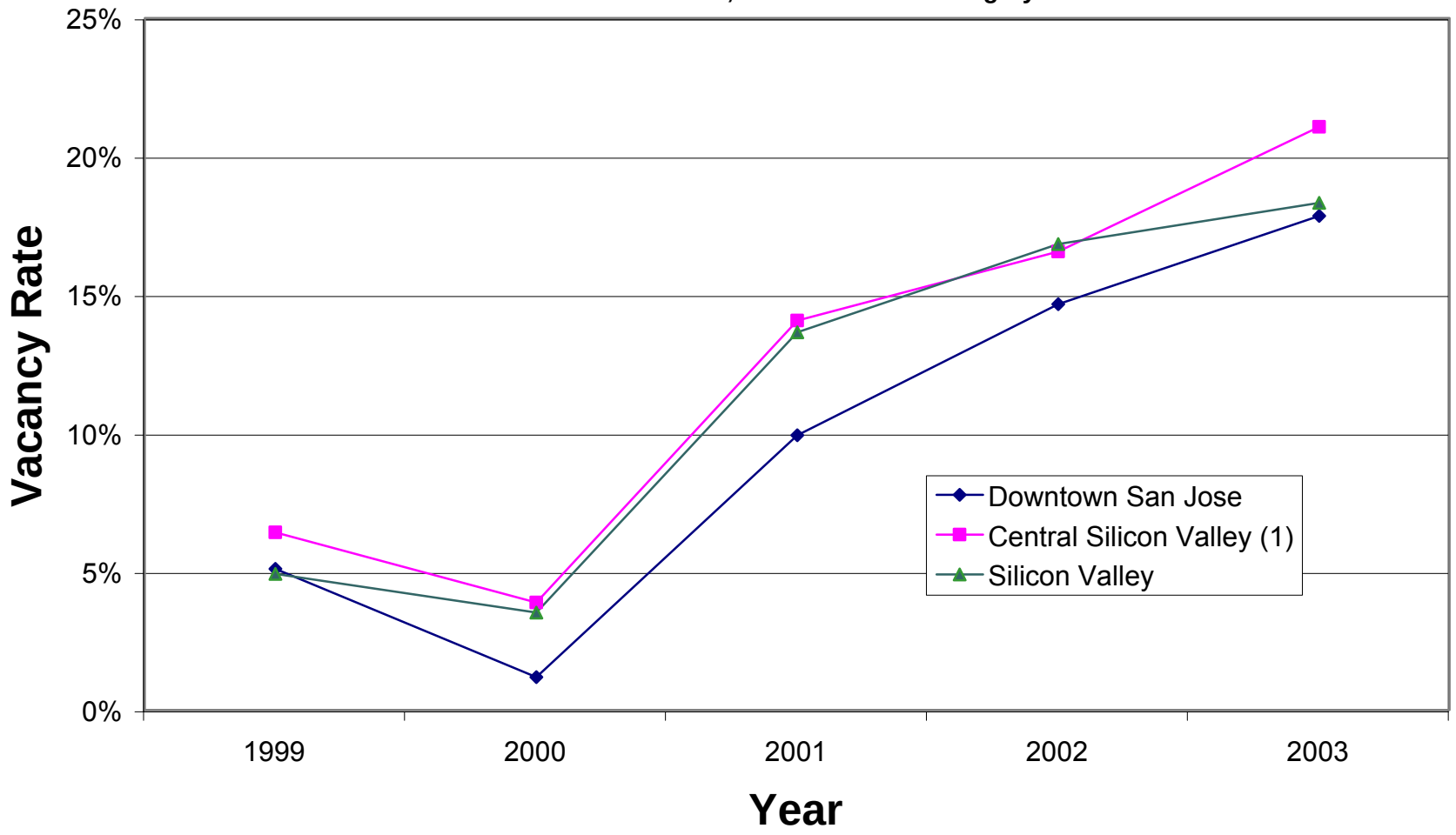
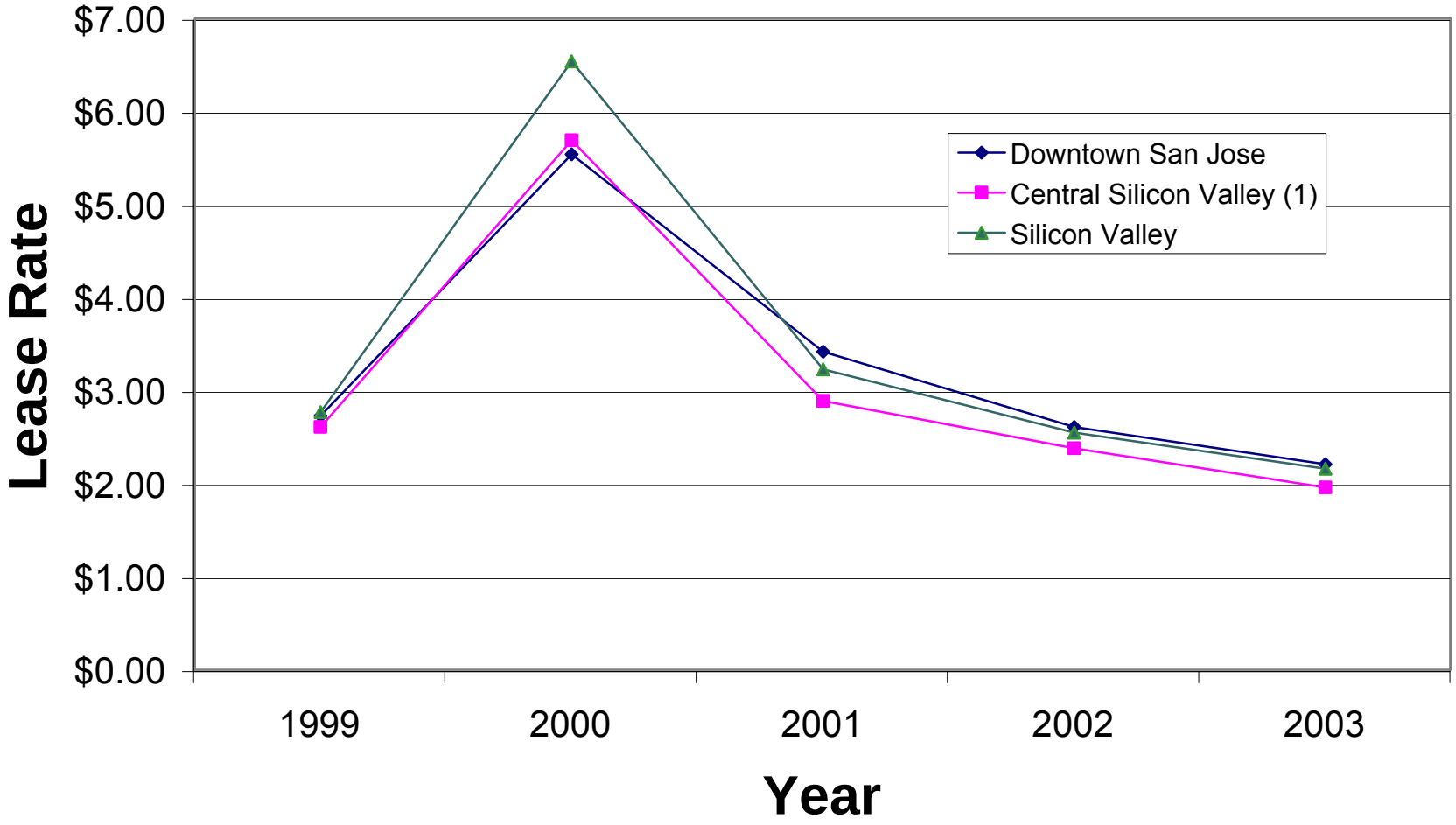


Figure 3.2
Comparison of Office Lease Rates, 1999-2003

(1) Central Silicon Valley includes non-Downtown San Jose, plus Sunnyvale and Santa Clara
Source: BT Commercial; Economic & Planning Systems



Absorption

San Jose's office absorption has been far more positive than that in the Silicon Valley generally during the last several years. As shown on **Table 3.3**, San Jose had a net positive absorption of 2.7 million square feet of office space over the five-year period from 1999 to 2003. The entire Silicon Valley region yielded a net positive of only 1.7 million square feet, meaning that outside of the San Jose market area, there was actually negative absorption of roughly one million square feet of office space

New Construction

The San Jose office market also captured a very high percentage of new office construction in the past five years. **Table 3.3** shows that the San Jose market captured 7.6 million of the region's total of 10.1 million square feet of new office space. This 75 percent capture rate significantly exceeds the San Jose market's share of total office space in Silicon Valley (56 percent), indicating that the San Jose market was among the most favored in all of Silicon Valley for new construction.

R&D

While San Jose's R&D market is fairly average in terms of vacancy rates and lease rates, San Jose is outperforming the region in terms of absorption and new construction. For this discussion, "R&D" space includes traditional research and development facilities featuring wet or dry labs, and also includes "heavy office" facilities that include exceptional power, cooling, and flooring to accommodate massive computer systems.

Vacant Space

Vacancy rates among R&D workspaces in San Jose have been generally consistent with those found elsewhere in the Silicon Valley. BT Commercial reports that in the first quarter of 2003, the R&D vacancy rate in San Jose was 22.8 percent, just below the regional average of 23.4 percent. During the prior quarter (end of 2003), San Jose's vacancy rate was slightly higher than the region's average, but in early 2003, San Jose was again slightly below the Silicon Valley's average R&D vacancy rate. In essence, there is not a large disparity between San Jose and the Silicon Valley on this R&D market indicator.

Lease Rates

The San Jose R&D market commands lease rates slightly below the average in the Silicon Valley. In the first quarter of 2004, San Jose's average R&D lease rate was $0.91 per month, while the Silicon Valley average was $0.95. In the previous quarter, San Jose was again a few cents below the regional average. In recent years, San Jose's R&D lease rates have consistently outperformed those in places like Fremont, Morgan Hill, and Gilroy,

Table 3.3
San Jose Workspace Absorption and Construction Trends, 1999 - 2003
Coyote Valley Market Analysis

Year	Office (1)		R&D		Manufacturing		Warehouse		All Workspace	
	Net Absorption (SF)	New Construction (SF)	Net Absorption (SF)	New Construction (SF)	Net Absorption (SF)	New Construction (SF)	Net Absorption (SF)	New Construction (SF)	Net Absorption (SF)	New Construction (SF)
San Jose Market Area										
1999	1,844,521	1,058,238	2,380,653	1,916,338	-54,545	40,000	-353,007	0	3,817,622	3,014,576
2000	6,532,421	6,022,482	6,795,982	3,481,876	710,477	283,821	352,112	0	14,390,992	9,788,179
2001	-3,331,357	403,010	-4,682,788	498,969	-1,145,841	39,676	-847,563	337,671	-10,007,549	1,279,326
2002	-1,062,068	75,000	-2,447,284	128,460	159,203	20,087	-293,625	0	-3,643,774	223,547
2003	-1,316,552	0	-1,600,928	0	67,533	0	68,566	0	-2,781,381	0
Five-Year Total	*2,666,965*	*7,558,730*	*445,635*	*6,025,643*	*-263,173*	*383,584*	*-1,073,517*	*337,671*	*1,775,910*	*14,305,628*
Silicon Valley Market Area										
1999	2,799,446	1,803,078	5,862,335	4,078,233	859,982	704,167	254,152	62,400	9,775,915	6,647,878
2000	6,937,927	6,547,105	12,887,204	7,392,447	1,708,363	421,921	911,661	85,398	22,445,155	14,446,871
2001	-5,482,491	1,108,350	-15,178,802	1,913,881	-3,641,834	193,718	-3,227,178	408,223	-27,530,305	3,624,172
2002	-1,855,952	239,843	-8,970,073	603,291	-703,098	42,387	-418,121	40,000	-11,947,244	925,521
2003	-656,896	381,000	-3,980,086	0	36,530	0	-1,041,927	0	-5,642,379	381,000
Five-Year Total	*1,742,034*	*10,079,376*	*-9,379,422*	*13,987,852*	*-1,740,057*	*1,362,193*	*-3,521,413*	*596,021*	*-12,898,858*	*26,025,442*

(1) San Jose figures reflect Downtown San Jose and Central Silicon Valley including remainder of San Jose (outside Downtown), as well as Sunnyvale and Santa Clara.

Source: BT Commercial; Economic & Planning Systems, Inc.

but been appreciably lower than those achieved in Palo Alto, Mountain View, and Cupertino. Palo Alto's R&D lease rates have been roughly double those achieved in San Jose.

Absorption

As with office space, the San Jose R&D market has performed better than the regional average in terms of absorption. As shown on Table 3.3, San Jose actually had positive net absorption of R&D space over the past five years, while the Silicon Valley overall had a negative net absorption of 9.4 million square feet.

New Construction

San Jose has captured roughly 6.0 million square feet of new R&D development since 1999 (see **Table 3.3**). As with the rest of the region, most of this new construction occurred in 1999 and 2000. The 6.0 million square feet of new R&D space in San Jose represent 43 percent of all new R&D construction in the Silicon Valley, far greater than San Jose's "fair share" of regional growth, given that San Jose represents only 27 percent of the overall R&D market in the Silicon Valley.

INDUSTRIAL

While industrial vacancy rates have not risen as rapidly as office or R&D vacancies, there is clear evidence in the absorption and new construction indicators that the development activity is moving away from industrial space toward more office and R&D product types. The industrial market includes both "manufacturing" and "warehouse" products, both of which typically feature generally open floor plans, high ceilings, and roll-up doors for loading and unloading freight.

Vacant Space

San Jose's vacancy rates for manufacturing space have been slightly better than average for Silicon Valley. According to BT Commercial, in the first quarter of 2004, San Jose's manufacturing vacancy rate was 7.1 percent, compared to 7.7 percent for the region generally. The manufacturing vacancy rates in San Jose were also lower than the regional average at the end of 2003, beginning of 2003, and end of 2002. In each time period, however, the difference between San Jose and the Silicon Valley overall was relatively small.

Warehouse vacancy rates in San Jose, on the other hand, have been higher than average for the Silicon Valley. In the first quarter of 2004, San Jose warehouse was 12.9 percent vacant, compared to 12.0 percent for Silicon Valley. This too has been a consistent trend over the last few years, with San Jose warehouse vacancy rates exceeding the Silicon Valley average by one to two percentage points.

Lease Rates

San Jose's industrial space generally achieves lower lease rates than in Silicon Valley generally. Lease rates for manufacturing space in San Jose averaged $0.49 per square foot in the first quarter of 2004, compared to $0.61 per square foot for the Silicon Valley overall. This disparity between San Jose and the rest of Silicon Valley has been consistent over the past several quarters. San Jose's manufacturing lease rates also have been consistently among the lowest in the entire region, well below the top-performing areas of Mountain View, Belmont, and Redwood City. Mountain View's manufacturing lease rates are more than double those in San Jose.

Lease rates for warehouse space in San Jose are more comparable to the averages for the Silicon Valley. In the beginning of 2004, warehouse lease rates in San Jose averaged $0.39 per square foot, compared to $0.42 for the Silicon Valley overall. At the end of 2003, the San Jose rate was $0.44, versus $0.45 for the Silicon Valley. While San Jose's rates are slightly below those in the greater regional market, they are much closer than are the industrial lease rates.

Absorption

Unlike office and R&D space, cumulative absorption of industrial space in San Jose has been negative over the past five years. **Table 3.3** shows the absorption trends in San Jose and the Silicon Valley generally from 1999 through 2003. It is interesting to note that, after a major net loss in 2001, manufacturing space actually showed positive absorption in San Jose during 2002 and 2003. Also, San Jose's actual share of negative absorption for both manufacturing and warehouse space actually fell below the City's "fair share," based on the proportion of the overall market that San Jose's space represents.

New Construction

Compared to office and R&D space, new construction of industrial space has been extremely limited, both in San Jose and in the broader Silicon Valley market area. The regional market added less than 2.0 million square feet of new manufacturing space and warehouse space combined during the past five years, compared to 24 million combined square feet of office and R&D space. In San Jose, only 720,000 square feet of new industrial space were developed, compared to 13.6 million square feet of new office and R&D space. In both geographies, industrial space comprised less than ten percent of new workspace developed in the past five years — eight percent in Silicon Valley and only five percent in San Jose. This percentage of new construction is far below industrial space's proportion of total workspace in both cases; industrial space accounts for 39 percent of all workspace in San Jose and 36 percent of all workspace in the Silicon Valley. Clearly, the trend in new construction has focused more on R&D and office space in recent years than it has on industrial space, whether manufacturing or warehouse space.

Despite that trend, there is likely to be some demand for new industrial space attributable to the expected growth of the biosciences industry. While some jobs in that industry will locate in multi-story R&D space, others will locate in low-rise industrial manufacturing space.

LAND

In 2000, San Jose's employment level equaled its amount of available space; workspace supply was almost full. Even though San Jose currently has a large amount of vacant workspace, most of that space is projected to be re-occupied as employment returns to its previous (circa 2000) levels, which is estimated by various sources to occur between 2005 and 2008.

Although more intensive use of existing space is expected, most growth above 2000 employment levels will require construction of new space. While some of this new space will be developed on land currently occupied by lower-density buildings, it is likely that most of the new development will occur on vacant land.

San Jose is uniquely positioned among other Silicon Valley cities because it has vacant land, such as Coyote Valley, to build upon. A study conducted for San Jose's Economic Development Department[10] has identified a total of 12,850 acres of land in active employment areas, of which 1,561 acres are vacant and potentially available for workspace development. This does not include the 1,400 acres of undeveloped land in North Coyote Valley or the 375 vacant acres in Evergreen. With those supplies added, the City has a total of roughly 3,335 acres of land available for workspace development.

According to that same report, San Jose is projected to gain approximately 141,000 net new jobs between 2000 and 2020. The job growth that the City of San Jose and the larger Silicon Valley region will be experiencing in the coming years will amount to a demand for roughly 48 million square feet of total workspace.[11] In order to accommodate projected employment growth, demand for new building space through 2020 is estimated at approximately 2,700 acres of land, including 1,412 acres for traditional workspaces (office, R&D, and industrial) and an additional 1,276 acres for retail and "institutional/other" workspace.

This data suggests that San Jose has an adequate supply of land to meet demand for new workspace through 2020, with over 600 acres more land available than are likely to be required. If San Jose's commercial development pattern does become denser as market data suggests, and/or land beneath existing buildings is redeveloped for higher density uses, the City's residual supply of land will be even greater.

---

[10] "Towards the Future: Jobs, Land Use and Fiscal Issues in San Jose's Key Employment Areas 2000-2020" by Strategic Economics, et al, February 2004.

[11] EPS has recalculated some figures from the referenced report, which stated demand for roughly 51 million square feet of new workspace.

IMPLICATIONS FOR THE COYOTE VALLEY SPECIFIC PLAN

The downturn in the regional, national, and international economy has had a profound effect on the performance of workspace real estate in the Silicon Valley. Vacancy rates have risen, lease rates have fallen, absorption of workspace has been negative, and new construction activity has slowed to nearly none. The performances of different product types in different locations, however, are informative as to what might be expected or preferred at Coyote Valley. Some of the implications of this market conditions review are as follows:

1. **Office workspace development opportunities appear to be strongest.** Office development has outperformed R&D and industrial development in terms of vacancy rates, lease rates, absorption, and/or new construction during the past five years. These findings hold true for the Silicon Valley generally and for San Jose in particular.

2. **Urban-style office workspace should command premium values.** The performance of Downtown San Jose office space, relative to less urban environments, indicates that vacancy rates and lease rates are comparatively strong for office space in vital, mixed-use urban areas.

3. **For the next several years, R&D space is much more likely to be build-to-suit development than speculative development.** There currently is an estimated supply of nearly 40 million square feet of existing R&D space throughout the Silicon Valley, being offered at very low lease rates.

4. **Industrial space appears to represent a less strong development opportunity.** While vacancy rates are relatively low, absorption and construction activity clearly indicate that the Silicon Valley and San Jose economies are shifting away from demand for manufacturing and warehouse space. However, growth in the bioscience industry in particular may provide continued demand for industrial space.

5. **Coyote Valley does not have a monopoly on available land in the City or region.** An adequate supply of land exists in San Jose to accommodate projected job growth and workspace development through 2020. While Coyote Valley clearly has the largest contiguous supply of such land, other properties in existing employment areas will compete for workspace development.

IV. COYOTE VALLEY'S COMPETITIVE POSITION

Coyote Valley has numerous qualities that will make it an attractive location for employers, but there are other potential employment locations that are competitive with or superior to Coyote Valley in certain respects. This chapter discusses the relative qualities of Coyote Valley compared to other potential employment locations, and aims to assess the competitive position of Coyote Valley for various types of employers and real estate development over time.

SAN JOSE AS COYOTE VALLEY'S PRIMARY COMPETITIVE MARKET AREA

Coyote Valley will compete regionally for the attraction of employers and workspace development. As a rule, any major employer who will consider development in Coyote Valley will also have other choices of locations throughout Silicon Valley. Similarly, speculative developers of workspace will compare the merits of development in Coyote Valley to other investment opportunities in the region.

Within this regional competition, the primary areas with which Coyote Valley will compete for development activity are those in San Jose. As discussed in previous chapters, San Jose is unique in the Silicon Valley in its ability to accommodate new employment growth. San Jose's economy is expected to grow by over 120,000 total jobs between 2000 and 2020; Santa Clara is a distant second with a projected gain of 26,690 jobs (see **Table 2.4**). The City of San Jose, by itself, is expected to absorb fully one-third of all new jobs in the Silicon Valley counties of San Mateo and Santa Clara.

Within the entire Bay Area, San Jose is ranked first in terms of absolute projected job growth, with only San Francisco posing a challenge. The City of San Jose is expected to gain more jobs than all but two Bay Area *counties* (Alameda and, of course, Santa Clara), and will have double the combined employment growth of the Tri-Valley cities of Dublin, Pleasanton, San Ramon, and Livermore (roughly 63,000).

Moreover, different development areas that are physically proximate can share access to common infrastructure and a similar workforce, and can operate under similar political or regulatory conditions. As such, Coyote Valley's strengths and weaknesses are most appropriately compared to those of other commercial/industrial areas within the City of San Jose.

ATTRIBUTES OF COYOTE VALLEY

The Coyote Valley Specific Plan is expected to provide an opportunity for significant workspace development. This section describes both the current and expected conditions in which this workspace may be provided in Coyote Valley.

Job Totals and Distribution

A study of the employment areas in the City of San Jose was completed in 2004. Due to its limited amount of existing development, Coyote Valley was not considered among the City's employment areas.

In the future, Coyote Valley is expected to be a significant employment area within the City of San Jose and in the Silicon Valley more generally. The City of San Jose has established a policy that Coyote Valley should be developed to provide workspace for not less than 50,000 workers, not including retail and public workers such as public safety workers, teachers, etc. The workspace that is currently located in Coyote Valley (e.g., the IBM campus) does not count toward that goal of 50,000 jobs.

Major Employers and Activities

At present, the only major employer in Coyote Valley is the IBM campus, which has been located on Bailey Avenue for several decades. IBM has several buildings clustered at their campus, employing roughly 2,100 to 2,300 workers conducting research in the roughly 550,000 square feet of R&D space.

The other employers in Coyote Valley include a Calpine energy plant and the Coyote Creek golf course. Both in the Greenbelt and in the areas for future development (North Coyote and the Urban Reserve), there are agricultural operations including orchards, row crops, and sod farming.

Prominent Real Estate Prototypes

The IBM campus represents the primary workspace example in Coyote Valley. This campus features clustered, mid-rise buildings with surface parking. The campus is internally oriented, with a central courtyard area, and has a substantial set-back from Bailey Avenue.

The vision for Coyote Valley's future is relatively permissive in terms of workspace prototypes. Workspace developments ranging from low-rise flex buildings to high-rise office buildings can be considered for Coyote Valley. However, to accommodate the goals of 50,000 jobs and 25,000 housing units in Coyote Valley, the development program is likely to mandate a relatively high density of development, requiring multi-story buildings for most workspace development and some structured parking.

The Built and Natural Environment

The IBM campus is located on several hundred acres, much of which is used for habitat restoration, water retention, and other environmental purposes. Most of the remainder of North Coyote and the Urban Reserve are undeveloped. The area offers attractive views of the hills to the north, east, and west, which are partially forested with oak trees. Coyote Valley also offers bike paths and greenways, as well as the golf course within Coyote Valley and access to recreational ponds and reservoirs both within Coyote Valley and in the nearby hills.

In the future, Coyote Valley is likely to feature additional open space amenities, including lakes, greenways, and active and passive parks. The vision for Coyote Valley also includes an active, mixed-use community core offering retail, entertainment, and possibly cultural activities as well as an urban blend of housing and workspace.

Real Estate Performance Indicators

No supply of leasable workspace in Coyote Valley exists that would provide information regarding achievable lease rates. Moreover, the sale and development of land in Coyote Valley has been affected by a variety of circumstances ranging from uncertainty regarding entitlements to incomplete transportation infrastructure. Rather than concluding that the paucity of development in Coyote Valley is necessarily an indication of the area's poor marketability, EPS believes it most meaningful to compare the future, entitled Coyote Valley to its competitive locations. Such conclusions are drawn at the end of this chapter.

Recent and Planned Development

As of spring 2004, the Coyote Valley Specific Plan area had the largest amount of workspace development in the pipeline of all areas in the City of San Jose. Four different applications, submitted by Coyote Valley Research Park (CVRP), were either under review or had Planned Development Permit notices sent or prepared. These four projects total just over 10 million square feet of commercial development on roughly 880 acres. The CVRP plan has provided for the eventual development of up to 16.7 million square feet of workspace on 1,444 acres in North Coyote Valley. That Specific Plan was established in 2000, but to date, none of the planned space has commenced construction.

As a result of the general economic downturn, Cisco Systems scaled back its plans to develop 6.6 million square feet of workspace in Coyote Valley, which had been expected to occur over a five-year period beginning in 2001. In the future, the company may develop a smaller campus in Coyote Valley, not expected to exceed 500,000 square feet of office/R&D space, but the timing of such development is unknown at this time.

Xilinx, a producer of programmable logic devices for the information technology industry, owns a 65-acre parcel of land at the western edge of the Valley, on which there is capacity (but not entitlements) to build up to 698,000 square feet of workspace. Xilinx representatives have indicated that the company itself may eventually require the full allowance of 698,000 square feet for a technology office campus of roughly four-story

buildings. This development would be phased over a period of several years, in increments of roughly 140,000 square feet. As their other San Jose properties are approaching capacity, Xilinx representatives believe construction of a first phase could commence as soon as entitlements and infrastructure are in place.

IBM, the lone large employer currently located in Coyote Valley, could add up to 400,000 square feet of office/R&D workspace on their land west of Santa Teresa Boulevard on Bailey Avenue. Such an addition would increase IBM's overall square footage at this location by over 70 percent. However, IBM has not expanded their existing campus since its initial construction in 1977, and has not expressed interest in doing so in the next several years.

Sobrato Development owns roughly 290 acres of land at Bailey Avenue and Santa Teresa Boulevard that is zoned for campus office/industrial development. Sobrato representatives report that, to date, no advanced discussions have occurred with potential tenants of build-to-suit office/R&D space at this location, and that speculative development is highly unlikely in the foreseeable future given current and projected market conditions as well as the high up-front cost of improving infrastructure for the site. As such, EPS anticipates that no new development will occur on the site in the next several years.

Again, due both to the economic downturn and the general uncertainty regarding the Coyote Valley Specific Plan and its eventual entitlements and infrastructure requirements, development in Coyote Valley has been slow and no firm dates are being attached to these development plans. Given the amount of office/R&D space currently available in the San Jose and Silicon Valley marketplaces, it is unlikely that speculative workspace development will occur at Coyote Valley in the next several years. Build-to-suit options, therefore, remain the top prospect for workspace development at Coyote Valley but, to date, representatives of the principal developer/landowner interests have not reported that any discussions of build-to-suit development at Coyote Valley have advanced beyond preliminary stages.

Transportation Access

Coyote Valley is located at the southern end of the City of San Jose, and is directly served by only one highway – Highway 101, which runs north-south through the Valley. Santa Teresa Boulevard and Monterey Highway (which is El Camino Real in most of California) provide north-south access to Coyote Valley. Bailey Avenue extends through Coyote Valley into the sparsely populated western hills.

Construction has begun on improvements to the interchange of Bailey Avenue and Highway 101, which will greatly improve regional automobile access to the site. Another interchange already exists at Highway 101 near the Coyote Creek golf course and may be improved, and a third interchange north of Bailey Avenue is likely to be constructed in the future, as provided in the CVRP plan. In addition, the CVRP plan

indicated that Highway 101 will be widened in the future to provide more capacity for vehicles associated with development in Coyote Valley.

For public transportation, Caltrain runs adjacent to Monterey Highway, and is expected to provide a future station near the Bailey Road intersection with Monterey Highway. Santa Clara Valley Transportation Authority's (VTA's) light rail does not currently extend into the Coyote Valley, but the vision for Coyote Valley includes a fixed-rail transit system that may serve the future Coyote Valley development as well as link to VTA's light rail station at Santa Teresa Boulevard a few miles to the north. VTA does currently provide bus service (Route 68) to Coyote Valley, which runs along Santa Teresa Boulevard from San Jose through Coyote Valley into Morgan Hill.

ATTRIBUTES OF OTHER EMPLOYMENT LOCATIONS

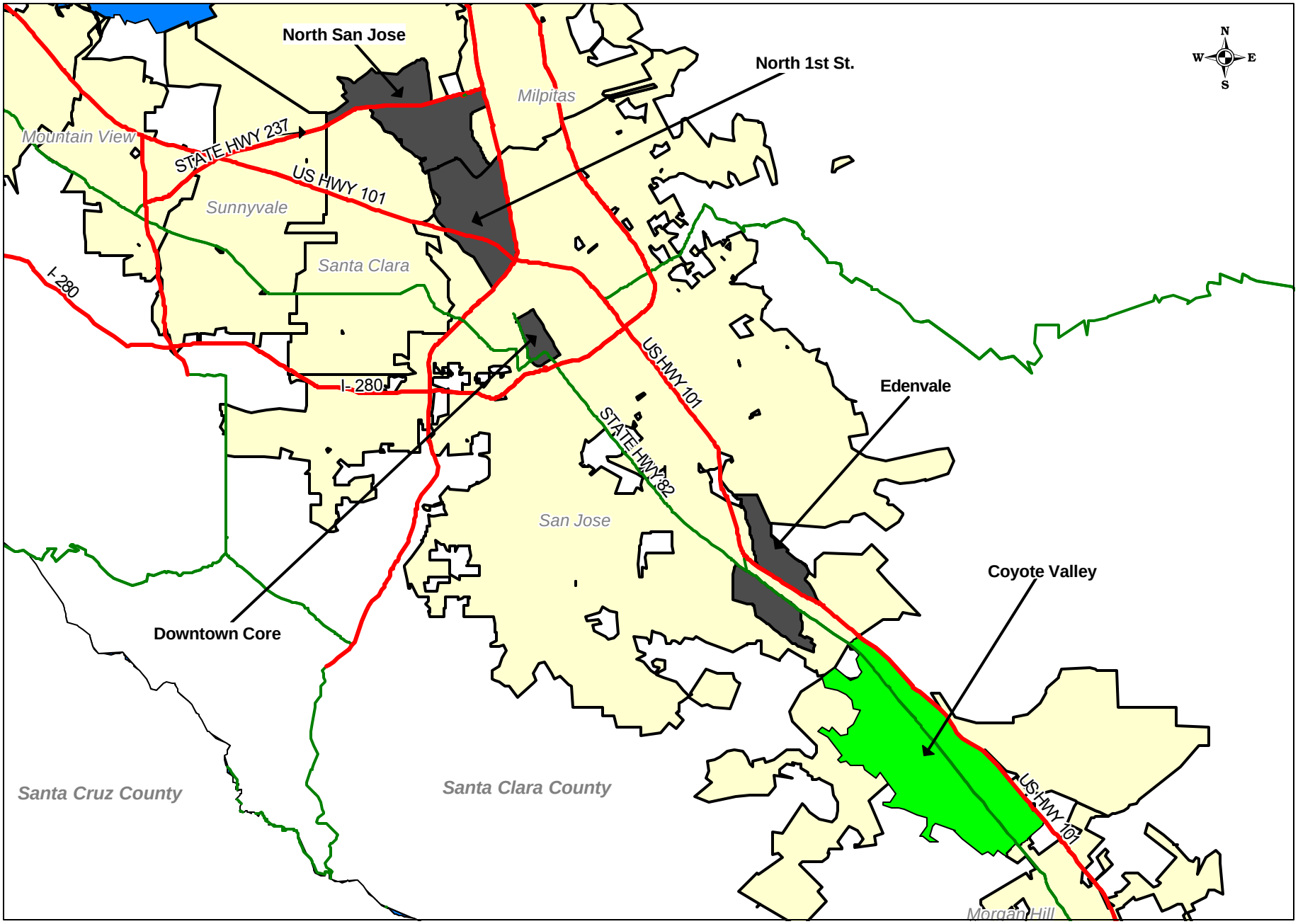
For this analysis, EPS has compared Coyote Valley to the employment areas in Downtown San Jose, North First Street, North San Jose, and Edenvale. Each of these was identified in a recent study commissioned by the City as areas where over 40 percent of all current employment is in "driving industries," meaning those industries that "sell the vast majority of their goods and services to customers located outside of the City."[12] While other employment areas will also offer competition for Coyote Valley – including the growing Evergreen area as well as areas outside of San Jose — the four areas highlighted here currently present Coyote Valley's strongest competition for San Jose's growth in "driving industry" employment. **Figure 4.1** illustrates the location of these competitive employment areas relative to Coyote Valley.

DOWNTOWN SAN JOSE

Downtown San Jose is located roughly 15 miles north of Coyote Valley, and is home to a wide variety of employers as well as the City's core cluster of cultural venues and visitor destinations. Downtown San Jose is the most urban of the competing employment areas, and as such is most similar to the type of development envisioned for Coyote Valley's mixed-use community core. Downtown San Jose will provide the strongest competition for the attraction of employers and employees seeking access to visitors, hospitality services, entertainment events, and the general activity level and feel of an urban work location.

[12] "Towards the Future: Jobs, Land Use and Fiscal Issues in San Jose's Key Employment Areas 2000-2020," Strategic Economics, et al., February 2004.

Figure 4.1:
Greater San Jose and Subregions



Economic & Planning Systems, Inc.

h:\13159\maps\mapinfo\fig_4_1.wor

Job Totals and Distribution

Downtown San Jose was estimated to be home to 20,458 jobs at the end of 2002 (see **Table 4.1)**. Of these, roughly 10,800 jobs (53 percent) were in the "driving industries," and another 4,700 jobs (23 percent) were in "business support industries." The residential population of Downtown San Jose is still relatively small but growing significantly, and 24 percent of Downtown jobs were in "household support industries" – more than in any of the other employment areas discussed here. These household supporting industries include civic and retail activities, which do tend to concentrate in downtown areas even if the residential population is relatively small.

The largest single industry sector represented in Downtown San Jose was "innovation services," which comprised 22.5 percent of all jobs Downtown (see **Table 4.2**). In all of the employment areas in the City of San Jose, only North First Street had more "innovation services" jobs than Downtown. The employers in this industry sector include legal services, accountants, engineering services, and various other types of consultants.

Downtown also had the highest percentage of jobs in the software industry, with 17.8 percent of all Downtown jobs in this industry. North San Jose had a higher absolute number of software jobs, but these represented a lower proportion of all jobs in North San Jose.

Typical of a Central Business District, Downtown San Jose also has the highest proportion of jobs in the visitor industry sector (hotels, convention services, etc.) and financial services (banking, accounting, etc.), and among the lowest proportions in industrial services and manufacturing.

Major Employers and Activities

Some of the prominent tenants in Downtown San Jose include Adobe (software), Earthlink (Internet service), several regional bank offices (First Bank, Bridge Bank, Comerica), a large utility company (PG&E) and the consulting firm of Ernst & Young. Each of these tenants either occupies buildings by themselves or is the primary tenant in Downtown high-rises.

A software incubator called the San Jose Software Business Cluster is located in Downtown San Jose, and is credited with generating substantial growth in the software industry. Most of the 2,000 jobs that have been spawned by the incubator have remained Downtown, and as noted above, software jobs account for 17.8 percent of Downtown jobs.

In addition, numerous hotels are located in Downtown San Jose, as well as the Convention Center and other visitor attractions including the Center for the Performing Arts and several museums. The HP Pavilion arena—home of the San Jose Sharks NHL hockey team—is located a few blocks west of Downtown San Jose.

Table 4.1
Profile of San Jose Employment Areas
Coyote Valley Market Analysis

Employment Area	Existing Land Use						% Employment by Industry Sector		
	2002 Jobs	Acres	Jobs/ Developed Acre	Vacant Acres	% Vacant	% Total City Jobs	Driving Industries	Business Support	Household-Serving
Downtown San Jose	20,458	287	73	5	2%	6%	53%	23%	24%
North First Street	52,467	2,101	27	166	8%	15%	48%	40%	12%
North San Jose	24,380	2,463	15	863	35%	7%	78%	13%	9%
Edenvale	13,489	1,632	10	239	15%	4%	66%	14%	20%
Total All Subareas	110,794	6,483	125	1,273	20%	31%	58%	28%	15%
Rest of City	244,551	n/a	n/a	n/a	n/a	69%	14%	32%	48%
Total City	355,345	n/a	n/a	n/a	n/a	100%	32%	30%	38%

Sources: California Employment Development Department; City of San Jose; Strategic Economics et al; Economic & Planning Systems, Inc.

Table 4.2
Employment Area Jobs by Industry Sector, 2002
Coyote Valley Market Analysis

Group/Industry	Downtown San Jose		North First Street		North San Jose		Edenvale	
	Jobs	Percent	Jobs	Percent	Jobs	Percent	Jobs	Percent
Driving Industries	**10,822**	**52.9%**	**24,999**	**47.6%**	**19,008**	**78.0%**	**8,819**	**65.4%**
Bioscience	20	0.1%	2,536	4.8%	751	3.1%	0	0.0%
Computer & Communications	0	0.0%	2,857	5.4%	10,111	41.5%	6,365	47.2%
Corporate Offices	327	1.6%	1,815	3.5%	267	1.1%	303	2.2%
Electronic Component	20	0.1%	3,502	6.7%	824	3.4%	373	2.8%
Innovation Services	4,603	22.5%	3,101	5.9%	558	2.3%	499	3.7%
Semiconductors	20	0.1%	3,782	7.2%	4,099	16.8%	559	4.1%
Software	3,642	17.8%	4,740	9.0%	2,397	9.8%	581	4.3%
Visitor	2,189	10.7%	1,699	3.2%	0	0.0%	152	1.1%
Business Support Industries	**4,767**	**23.3%**	**21,132**	**40.3%**	**3,255**	**13.3%**	**1,965**	**14.6%**
Building/Construction/Real Estate	736	3.6%	2,541	4.8%	0	0.0%	266	2.0%
Business Services	1,739	8.5%	7,700	14.7%	52	0.2%	538	4.0%
Financial Services (2)	1,944	9.5%	1,354	2.6%	25	0.1%	277	2.1%
Industrial Supplies and Services	0	0.0%	1,512	2.9%	727	3.0%	216	1.6%
Transportation/Distribution	20	0.1%	909	1.7%	194	0.8%	127	0.9%
Misc. Manufacturing	286	1.4%	7,127	13.6%	2,208	9.1%	532	3.9%
Consumer Services (3)	41	0.2%	20	0.0%	24	0.1%	0	0.0%
Household Supporting Industries	**4,869**	**23.8%**	**6,337**	**12.1%**	**2,118**	**8.7%**	**2,705**	**20.1%**
Civic	1,493	7.3%	1,369	2.6%	1,430	5.9%	431	3.2%
Health Care	41	0.2%	262	0.5%	48	0.2%	250	1.9%
Retail/Consumer Services	3,335	16.3%	4,568	8.7%	639	2.6%	3	0.0%
Total Demand	**20,458**		**52,467**		**24,380**		**13,489**	

Sources: Strategic Economics, et al; City of San Jose; Economic & Planning Systems, Inc.

Prominent Real Estate Prototypes

Downtown San Jose features numerous mixed-use buildings, providing retail or restaurants on the ground floors and offices, hotels, or residential units above. Most of the office buildings in Downtown San Jose are mid- to high-rise buildings and serve more than one tenant. However, other buildings or clusters of buildings are occupied by a single tenant. For example, Adobe has developed an "urban campus" in Downtown San Jose, which features several connected high-rise office buildings and a private parking garage for Adobe employees.

Relative to the other employment areas discussed in this chapter, Downtown San Jose has very few land parcels being utilized for industrial or R&D functions, and a much higher proportion being used for retail uses.

The Built and Natural Environment

Downtown San Jose offers a unique and improving urban location for employers in San Jose. With both vertical and horizontal mixed-use very prominent in this area, Downtown workers can easily walk to a variety of dining options (take-out, fast food, and sit-down), as well as conveniences (drug stores, dry cleaners, etc.), shopping areas (apparel, shoes, etc.), and entertainment options (bars, live music venues, art galleries, etc.).

Parking is provided in a variety of locations in Downtown San Jose. Numerous surface parking lots are spread throughout Downtown, and structured parking is also provided, within or beneath buildings or as stand-alone parking structures. Some parking structures are available only to employees of specific buildings or firms (such as Adobe), while others are available for public use.

The Downtown area features one prominent park (Plaza de Cesar Chavez) around which several of the area's higher-end hotels are located. This park is also proximate to the Convention Center. Beyond this park, Downtown does not offer expansive areas of open space, but the urban streets are lined with trees.

Real Estate Performance Indicators

Downtown San Jose has been among the Silicon Valley's strongest market areas for all types of real estate during the recent economic downturn. Recent statistics for Downtown San Jose's real estate performance, and that in the other competitive employment areas, are shown on **Table 4.3**.

Office

According to BT Commercial, Downtown San Jose had a supply of 8.4 million square feet of office space in the first quarter of 2004, which represented just over one-third of the office space in San Jose. The vacancy rate among Downtown office space was 16.7 percent, which was higher than in North San Jose and the North First Street area

Table 4.3
Real Estate Market Indicators by Employment Area, First Quarter 2004
Coyote Valley Market Analysis

Group/Industry	Downtown San Jose (1)	North First Street/ North San Jose (2)	Edenvale (3)	Silicon Valley
Office Market				
Total Square Feet in Supply	8,429,270	11,008,801	1,877,152	67,254,992
Vacancy Rate	16.7%	13.5%	27.2%	17.6%
Vacant Square Feet	1,407,688	1,486,188	510,585	11,836,879
Average Asking Rent	$2.22	$1.84	$1.72	$2.10
Class A	*$2.49*	*$1.95*	*$1.75*	*$2.15*
Class B	*$1.76*	*$1.50*	*$1.45*	*$1.82*
R&D Market				
Total Square Feet in Supply	2,216,122	27,590,601	8,964,817	170,310,772
Vacancy Rate	5.8%	19.5%	32.7%	21.5%
Vacant Square Feet	128,535	5,380,167	2,931,495	36,616,816
Average Asking Rent	$0.80	$0.85	$0.95	$0.95
Industrial Market				
Total Square Feet in Supply	9,667,441	12,044,089	524,244	115,156,174
Vacancy Rate	4.1%	10.9%	2.4%	10.1%
Vacant Square Feet	396,365	1,312,806	12,582	11,630,774
Average Asking Rent				
Manufacturing	*$0.59*	*$0.60*	*$0.70*	*$0.59*
Warehouse	*$0.30*	*$0.44*	*n/a*	*$0.43*

(1) Data presented for Downtown San Jose reflect the boundaries defined by CB Richard Ellis and BT Commercial, which are larger than those defined by EPS.
(2) North First Street and North San Jose are reported as one market area ("North San Jose") by CB Richard Ellis and BT Commercial.
(3) Edenvale is part of CB Richard Ellis' "San Jose - South" market area, and BT Commercial's "South San Jose" market area.

Sources: BT Commercial; CB Richard Ellis; Economic & Planning Systems, Inc.

(a combined 13.5 percent), and significantly higher than in the area around San Jose's Civic Center (only 6.3 percent), but lower than in South San Jose (27.2 percent). Downtown San Jose's vacancy rate had increased by 2.8 percentage points during the previous 12 months, and the vacancy rate in North San Jose and the North First Street area had a similar increase. Downtown's vacancy rates have also been consistently competitive with or below those found in Silicon Valley generally over the past five years (see **Figure 3.1**). The current vacant office space in Downtown San Jose totals roughly 1.4 million square feet.

Despite its high vacancy rates compared to the more northerly employment areas in San Jose, Downtown still commanded the highest office lease rates. The average asking rate in Downtown San Jose was $2.22 per square foot per month – significantly higher than the $1.84 rate in North San Jose and North First Street areas and $1.70 in the Civic Center area. CB Richard Ellis reports that Class A space shows even larger discrepancies, as Downtown Class A office is currently achieving rents at $2.49 per square foot, compared to $1.95 in the San Jose's northern employment areas. As previously shown on **Figure 3.2**, Downtown San Jose's office space lease rates have tracked consistently with those in Silicon Valley overall during the last five years.

Compared to the rest of Silicon Valley, Downtown San Jose office space has performed better than average. Current overall office rent rates are a few percentage points above average ($2.22 versus $2.10), and vacancy rates are slightly below average (16.7 percent versus 17.6 percent). Downtown San Jose's comparative strength versus the overall Silicon Valley office market has been consistent since 2001, with BT Commercial reporting higher rent rates and lower vacancies.

These office performance indicators suggest that, while Downtown San Jose has certainly not been immune to the economic hardships felt throughout Silicon Valley, the area has performed adequately. Looking forward, Downtown San Jose is likely to continue to command premium rents for firms seeking locations in an urban, mixed-use environment.

R&D

The R&D market is not a strong presence within the most immediate core of Downtown San Jose. However, in an expanded definition of "Downtown," which would include the area bounded by Highway 101 to the east, Interstate 880 to the north, and Interstate 280 to the south, there is 2.2 million square feet of R&D space. While this figure still ranks the Downtown area among the smallest R&D submarkets, it still represents employment space for as many as 6,000 or more R&D workers.

Within this expanded Downtown area, R&D vacancy rates are among the lowest in all of the Silicon Valley, at 5.8 percent compared to 21.5 percent for the regional market overall. While this low vacancy is a very positive indicator for the Downtown R&D

market, the achievable lease rates are very low, at $0.80 per square foot. This ranks last among the Silicon Valley's submarkets, which average $0.95 per square foot and reach as high as $1.50 in Palo Alto.

Industrial

Like R&D, industrial space is not a major presence in the immediate core of Downtown San Jose. Using the same expanded market area boundaries, however, industrial space becomes a much more prominent feature.

The greater Downtown area has 9.7 million square feet of industrial space. Vacancy rates among this Downtown industrial space are very low, at 4.1 percent compared to 9.3 percent for the Silicon Valley region generally. As with R&D space, however, achievable lease rates are not as impressive. Manufacturing lease rates are $0.59 per square foot, equal to the regional average, but warehouse lease rates are only $0.30 per square foot, compared to the regional average of $0.43 per square foot.

Recent and Planned Development

Advanced development proposals in Downtown San Jose are somewhat scarce, arguably due to a lack of available land and the difficulties of urban infill. According to City documents, only about five acres of vacant land exist in Downtown San Jose.

The largest project slated for Downtown is the 860,000-square foot "Plaza @ Almaden," a 19-story commercial development of office space and ground floor retail. This project is being planned by the San Jose Redevelopment Agency and Boston Properties, and will be located across Almaden Boulevard from the Convention Center. A 68,000-square foot mixed-use commercial project is also planned for San Fernando Street between 1st and 2nd Streets. In addition, a 254-room "Courtyard by Marriott" hotel is proposed at the junction of Santa Clara Street and Highway 87, as well as a 1.0 million-square foot office complex proposed just west of Highway 87 on San Fernando Street.

These proposed projects will follow the recent construction of Adobe Systems' 269,000-square foot high-rise campus on Almaden Boulevard. According to BT Commercial, Downtown San Jose had a total of 381,000 square feet of new office construction in 2002 and 2003—more than was achieved in the entire remainder of Silicon Valley during that time (240,000 square feet). Clearly, Downtown San Jose is undergoing significant intensification and capturing interest in very urban, high-rise, and mixed-use development.

Transportation Access

Downtown San Jose is accessible from Highway 87 or Highway 280, which intersect on the southwestern side of Downtown. These two highways quickly connect Downtown San Jose to the regional freeway system including Highway 101 (from San Francisco and Gilroy), Highway 880 (from Hayward and Oakland), and Highway 680 (from Walnut Creek and the Tri-Valley area). In addition, Highway 82 – which is El Camino Real most of the way from San Francisco to San Diego – runs through Downtown.

In addition to these automobile routes, Downtown also has light rail service and numerous bus routes, and is relatively close to San Jose's international airport. Caltrain does not have a station within Downtown San Jose, but the Diridon Station of Caltrain's system is located just west of Downtown near the HP Pavilion arena (roughly ½ mile west of Highway 87).

NORTH FIRST STREET

For purposes of this discussion, the "North First Street" area is located along North First Street and is bordered by Interstate 880 on the east and south, the Montague Expressway (Highway G4) on the north, and Highway 87 and the Santa Clara city boundary on the west. This area's southern edge is roughly two miles north of Downtown San Jose, and over 12 miles north of Coyote Valley.

Job Totals and Distribution

In 2002, the North First Street area was the location of 52,467 jobs (see **Tables 4.1 and 4.2**). Of these, 25,000 (48 percent) were in the driving industries. These driving sector jobs were relatively evenly distributed among biosciences, computers and communication, electronic components, innovation services, semiconductors, and software, with none of these sectors accounting for less than five percent nor more than nine percent of total jobs in the area. Within the North First Street area, however, there were some geographic differences, as innovation services tended to be clustered right along North First Street while computer and communications firms were concentrated west of North First Street and electronic components were concentrated east of North First Street.

Major Employers and Activities

Numerous major employers are located in the North First Street area, representing a wide variety of business types. Examples include eBay, Siemens, Brocade, Agilent Tech, Fujitsu, Sun Microsystems, Texas Instruments, BEA (software), and Mizuho Bank. In addition, the Silicon Valley Conference Center is located at the Ebay development on North First Street.

Prominent Real Estate Prototypes

The North First Street area features a wide variety of workspaces, ranging from one-story distribution buildings to mid-rise office buildings. The buildings occupied by eBay and BEA, for instance, are under five stories and offer surface parking. By contrast, buildings occupied by Siemens and Infineon are six or more stories and involve structured parking. The tallest building in the area appears to be the "First Montague" development on the southwest corner of First Street and the Montague Expressway, which stands seven stories tall. Among all these mid-rise buildings, however, are an even larger number of one- and two-story office/flex buildings occupied by single tenants or multiple tenants.

The Built and Natural Environment

In addition to the variety of workspaces described above, the North First Street area features several hotels, retail spaces (both in-line spaces and stand-alone buildings), and apartment developments. These uses tend to be located at the area's southern end, nearest Interstate 880 and the airport.

Coyote Creek defines the City of San Jose's border with Milpitas, and the Guadalupe River runs along the North First Street area's boundary with the airport and Santa Clara boundary, but both of these waterways are peripheral to the employment area. No other public parks or open spaces were identified on a tour of the area.

Real Estate Performance Indicators

A windshield survey of North First Street reveals a significant amount of vacant workspace. Space appears to be available for lease in all of the different product types located in the North First Street area, from one-story "tilt-ups" to mid-rise office buildings. However, there is also evidence that this employment area was subject to significant development in the most recent economic expansion. The buildings occupied by eBay, BEA, Siemens, and others at the area's southern end (nearest the airport) are all relatively new.

Office

According to office brokers, the North First Street office market has shown mixed signs of strength and weakness (see **Table 4.3**). Vacancy rates are currently estimated at 13.5 percent, a few percentage points lower than in Downtown San Jose (16.7 percent) and still farther below the overall Silicon Valley average (17.6 percent). A total of 1.5 million square feet of office space is currently available in the North First Street vicinity.

While current vacancy rates are better than average, average office lease rates in the North First Street area fall below those being achieved elsewhere, at $1.84 per square foot compared to $2.22 in Downtown and $2.10 in Silicon Valley generally. Class A office space in the North First Street area has also achieved lower lease rates, at $1.95 per square foot compared to $2.49 in Downtown San Jose.

Over the past several years, BT Commercial indicates that the general "Central Silicon Valley" office market area that includes North First Street has performed slightly below average for the overall Silicon Valley. Since 2000, the Central Silicon Valley's vacancy rates have been consistently higher than average, and lease rates lower than average. However, Central Silicon Valley has captured the majority of new office development in the Silicon Valley, with 5.8 million of the region's 8.3 million square feet being constructed in Central Silicon Valley. Almost all of this new office development — both in Central Silicon Valley and in Silicon Valley generally — occurred in the year 2000.

R&D

The R&D market in the North First Street area is very large, but currently shows signs of weakness. According to CB Richard Ellis, North San Jose has a total supply of 27.6 million square feet of R&D space, making it the largest single market area in the entire Silicon Valley inventory. However, 5.4 million square feet of that space were vacant in the first quarter of 2004, resulting in a 19.5 percent vacancy rate. This vacancy rate, while below the regional average of 21.6 percent, is still very high.

Moreover, the lease rates for R&D space in the North First Street area are well below the Silicon Valley regional average, at $0.85 per square foot compared to $0.98 in Silicon Valley overall.

San Jose captured much of the region's overall construction of R&D space over the past several years. BT Commercial reports that 9.9 million total square feet of R&D space were built in Silicon Valley between 2000 and 2003, and 4.1 million square feet (42 percent) of that space were built in San Jose. This rate of capture is significantly higher than San Jose's overall proportion of Silicon Valley R&D space (27 percent), indicating San Jose's growing competitive strength as an R&D location.

Industrial

According to CB Richard Ellis, the North First Street area is part of the third largest industrial market area in Santa Clara County, with 12.0 million square feet of leasable industrial space (behind only Santa Clara's 18.8 million and Fremont/Newark's 27.9 million). Industrial vacancy rates in the North First Street area are slightly higher than the Silicon Valley average, at 10.9 percent compared to 9.3 percent overall. However, lease rates are slightly above average, at $0.44 per square foot for warehouse space (compared to $0.43 regionally), and $0.62 for manufacturing space (compared to $0.59).

Very little new industrial space has been built in the North First Street area in recent years. According to BT Commercial, only 30,000 square feet of new manufacturing space were built in the general North San Jose area between 2000 and 2005 (compared to 700,000 square feet regionally), and no warehouse space was built in the North San Jose area (out of 535,000 square feet regionally). Overall, the general North San Jose area captured less than 3 percent of the region's industrial development over a five-year period, while representing over 10 percent of the region's total supply. This construction capture thus represents far less than a pro rata share of recent development, indicating that the North First Street area seems to be growing less competitive for industrial development. The area's growing competitiveness for office and R&D development seems to be driving land values beyond those that can be supported by industrial development.

Recent and Planned Development

In the past several years, several new workspace projects have been developed in the North First Street area. The Skyport Plaza project added 555,000 square feet of office space on North First Street just east of the airport. BEA Systems and eBay have also moved into new office buildings in this area.

Plans for the future of the North First Street area include significant intensification of use. The City is in the process of updating the area development policy for North San Jose. As currently envisioned, the new policy would add capacity for as many as 20 million square feet of workspace along North First Street by increasing the allowable Floor Area Ratio from roughly 0.35 to 1.20. Most of this increased capacity would be allowed in the North First Street area, although some additional capacity may be realized north of Montague Expressway (discussed herein as the "North San Jose" area rather than "North First Street"). This new development would take advantage of the VTA light rail and also replace some of the older, low-density workspace with more land-efficient uses (e.g., higher densities, more structured parking, etc.).

While this ambitious public vision for North First Street is being formulated, several private development plans are already being proposed or approved. BEA Systems has requested rezoning for an additional 2.8 million square feet of office space (1.4 million have already received approval), and eBay has proposed an additional 1.1 million square feet of office space (331,000 square feet were already approved). In addition, there is a proposal for a second phase of Skyport Plaza for an additional 550,000 square feet of office space.

Clearly, North First Street is attracting a significant amount of interest for new workspace development. North First Street still has a moderate amount of vacant land that is available for employment uses, totaling 166 acres. The majority of this vacant land lies north of Highway 101. The southern portion, which is home to many of the recently built and proposed office buildings, has only two acres of vacant land remaining.

Transportation Access

The North First Street area offers highly competitive and diverse transportation access. The area is served directly by Interstate 880 and Highway 101, linking it to the major employment and population centers of the San Francisco Peninsula and the interior East Bay. In addition, a recent improvement to Highway 87 has provided better access between the North First Street area and Downtown San Jose.

In addition, North First Street is the primary spine of the VTA light rail system through San Jose, and numerous bus lines also serve the area. And, importantly, the North First Street area is the most proximate employment area to the San Jose International Airport. However, Caltrain does not have a station within the North First Street employment area.

NORTH SAN JOSE

For purposes of this discussion, "North San Jose" is the area north of the Montague Expressway (Highway G4). This area's southern edge is located roughly five miles north of Downtown San Jose, and over 15 miles north of Coyote Valley.

Job Totals and Distribution

In 2002, the North San Jose area was the location of 24,380 jobs (see **Tables 4.1 and 4.2**). Of these, 19,000 (78 percent) were in the driving industries. Over 40 percent of all jobs in North San Jose were involved in the "computer and communications" industry sector, making it the strongest sector in the area with roughly 10,000 workers. "Semiconductors" comprised the second largest industry sector, with roughly 4,000 employees. Of all employment subareas in the City, North San Jose had by far the lowest proportion of jobs in the retail sector, with only about 500 retail employees (2.6 percent).

At present, the vast majority of the employment in North San Jose is located south of Highway 237. Of the 24,380 jobs identified in North San Jose in 2002, fewer than 200 were located north of Highway 237.

Major Employers and Activities

The largest employer in North San Jose is Cisco Systems. Cisco occupies large campuses both east and west of North First Street along Tasman Drive. Other major employers include Novellus, Cypress Semiconductor, Samsung, Sony, Lockheed Martin, Hitachi, and Canon.

Prominent Real Estate Prototypes

Most of the workspace in North San Jose is in low-rise buildings, including office buildings and industrial/flex buildings. The buildings north of Highway 237 are predominantly one or two stories. South of Highway 237, some taller buildings exist, but relatively few are more than three stories. Almost all of the buildings in North San Jose have surface parking. The rare exception is the Altera facility, which has structured parking garages.

Several single-user campuses exist in North San Jose, the most prominent of which are occupied by Cisco Systems. The Cisco campuses feature low-rise buildings of up to five stories, with ample supplies of surface parking.

The Built and Natural Environment

Much of North San Jose is developed for workspace, including small and large parcels in industrial, R&D, and office uses. North San Jose also has a high proportion of the total parcels (but not necessarily acreage) in residential use, including subdivisions accessible from North First Street, Tasman Drive, and the Montague Expressway. In addition, a

large multifamily housing project is under construction on North First Street. This project, called the "North Park Apartment Village," will offer roughly 2,700 apartment units and a newly dedicated public park, "Moitozo Park."

North San Jose has relatively few urban or natural amenities. As mentioned above, there is little retail development in North San Jose. However, the Rivermark mixed-use project in Santa Clara is easily accessible via the Montague Expressway, and offers a variety of convenience retailers and dining options. The Guadalupe River and Coyote Creek define the City of San Jose's borders with Santa Clara and Milpitas, respectively, but are peripheral to the employment area. No other public parks or open spaces were identified on a tour of the area.

Real Estate Performance Indicators

The "North San Jose" employment area has similar characteristics to those in "North First Street" area.[13] A windshield survey of North San Jose reveals a significant amount of vacant workspace. North of Highway 237, the Baytech Business Park appears to be far less than 50 percent occupied. The gateway to this business park features a pair of newly constructed office buildings that are part of Cisco's property, but appear never to have been occupied. South of Highway 237, there is also a large amount of available workspace, although the continued presence of major employers activates this southern portion of the overall North San Jose employment area.

Office

According to office brokers, the North San Jose office market has shown mixed signs of strength and weakness (see **Table 4.3)**. Vacancy rates are currently estimated at 13.5 percent, a few percentage points lower than in Downtown San Jose (16.7 percent) and still farther below the overall Silicon Valley average (17.6 percent). A total of 1.5 million square feet of office space is currently available in the North San Jose vicinity.

While current vacancy rates are better than average, average office lease rates in the North San Jose area fall below those being achieved elsewhere, at $1.84 per square foot compared to $2.22 in Downtown and $2.10 in Silicon Valley generally. Class A office space in the North San Jose area has also achieved lower lease rates, at $1.95 per square foot compared to $2.49 in Downtown San Jose.

Over the past several years, BT Commercial indicates that the general "Central Silicon Valley" office market area that includes North San Jose has performed slightly below average for the overall Silicon Valley. Since 2000, the Central Silicon Valley's vacancy rates have been consistently higher than average, and lease rates lower than average. However, Central Silicon Valley has captured the majority of new office development in

[13] EPS has drawn a distinction between the "North First Street" and "North San Jose" areas that is not drawn in reports by office brokers such as Colliers International, CB Richard Ellis, and BT Commercial. As a result, the property performance statistics available for the two areas are the same. EPS draws the distinction because the North First Street is better served by transit and is envisioned for greater intensification of use.

the Silicon Valley, with 5.8 million of the region's 8.3 million square feet being constructed in Central Silicon Valley. Almost all of this new office development — both in Central Silicon Valley and in Silicon Valley generally — occurred in the year 2000.

R&D

The R&D market in the North San Jose area is very large, but currently shows signs of weakness. According to CB Richard Ellis, North San Jose has a total supply of 27.6 million square feet of R&D space, making it the largest single market area in their entire Silicon Valley inventory. However, 5.4 million square feet of that space were vacant in the first quarter of 2004, resulting in a 19.5 percent vacancy rate. This vacancy rate, while below the regional average of 21.6 percent, is still very high.

Moreover, the lease rates for R&D space in the North San Jose area are well below the Silicon Valley regional average, at $0.85 per square foot compared to $0.98 in Silicon Valley overall.

San Jose captured much of the region's overall construction of R&D space over the past several years. BT Commercial reports that 9.9 million total square feet of R&D space were built in Silicon Valley between 2000 and 2003, and 4.1 million (42 percent) of that space were built in San Jose. This rate of capture is significantly higher than San Jose's overall proportion of Silicon Valley R&D space (27 percent), indicating San Jose's growing competitive strength as an R&D location.

Industrial

According to CB Richard Ellis, North San Jose is the third largest industrial market area in Santa Clara County, with 12.0 million square feet of leasable industrial space (behind only Santa Clara's 18.8 million and Fremont/Newark's 27.9 million). Industrial vacancy rates in the North San Jose area are slightly higher than the regional average, at 10.9 percent compared to 9.3 percent overall. However, lease rates are slightly above average, at $0.44 per square foot for warehouse space (compared to $0.43 regionally), and $0.62 for manufacturing space (compared to $0.59).

Very little new industrial space has been built in the North San Jose area in recent years. According to BT Commercial, only 30,000 square feet of new manufacturing space were built in the general North San Jose area between 2000 and 2005 (compared to 700,000 square feet regionally), and no warehouse space was built in the North San Jose area (out of 535,000 square feet regionally). Overall, the North San Jose area captured less than three percent of the region's industrial development over a five-year period, while representing over 10 percent of the region's total supply. This construction capture thus represents far less than a pro rata share of recent development, indicating that the North San Jose area seems to be growing less competitive for industrial development.

Recent and Planned Development

In the past few years, several new workspace developments have been built in North San Jose. Cisco Systems has built much of its headquarters campus (comprising more than 35 buildings) on both sides of North First Street at Tasman Drive. In addition, Cypress Semiconductor built a 111,000-square foot facility, and Altera has completed a 150,000-square foot facility.

As noted above in the discussion of North First Street, the North San Jose area may benefit from some additional development capacity as a result of the City's update of the area development policy. While this ambitious development policy for North San Jose is being formulated, several very large private development plans are being discussed. Among those under consideration is Palm Inc.'s approved 1.6 million-square foot campus on the south side of the junction of North First Street and Highway 237, and Cisco's approved 1.9 million square foot campus expansion on the north side of Highway 237. In addition, U.S. Dataport has been approved for a 2.2 million square foot campus near Zanker Road on the north side of Highway 237, and Legacy Partners is approved for a 990,000 square foot speculative office campus at Gold Street on the north side of Highway 237.

North San Jose has a significant amount of vacant land that is available for employment uses, totaling 863 acres. The majority of this vacant land (584 acres) lies north of Highway 237. This northern portion is less than half built-out. South of Highway 237, there are 279 additional vacant acres, comprising 20 percent of that southern portion.

Transportation Access

North San Jose has direct regional freeway access from Highway 237, which connects it to Interstate 880 and Highway 101. In addition, a portion of North San Jose is served by the VTA light rail that runs along Tasman Drive and North First Street, and is served by numerous bus routes. North San Jose is also highly accessible from the San Jose International Airport, which is located less than two miles to the south. However, Caltrain does not have a station within the North San Jose employment area.

EDENVALE

The Edenvale employment area is located at the convergence of Highways 85 and 101 in South San Jose, roughly two miles north of Coyote Valley.

Job Totals and Distribution

In 2002, the Edenvale employment area was home to firms that employed roughly 13,500 employees (see **Tables 4.1 and 4.2**). Two-thirds of these employees were in the "driving industry" sectors. Nearly half (47 percent) of all employees in the Edenvale area worked in the computer and communications industry sector. Other driving industries, such as semiconductors and software, represented less than five percent of all jobs in the Edenvale area.

Edenvale does have a higher proportion of retail jobs than most of the competitive employment areas within the City of San Jose. Roughly 15 percent of jobs in Edenvale are in the retail sector, compared to less than 10 percent in North San Jose and the North First Street area.

The City of San Jose's commissioned study of employment areas did not include the medical uses at Cottle Road and Santa Teresa Boulevard as part of the Edenvale employment area. These uses, which include the Santa Teresa Community Hospital and other ancillary medical offices, would contribute significantly to the proportion of jobs in Edenvale associated with health care services.

Major Employers and Activities

The major employers in the Edenvale area include Hitachi, IBM, Solectron, Cisco, Stryker Endoscopy, Electroglas, and Photon Dynamics. In addition, a bioscience incubator is currently in development in the Edenvale Technology Park east of Highway 101.

As mentioned above, there is also a significant cluster of health care services, including a community hospital, in the general vicinity of the Edenvale employment area.

Prominent Real Estate Prototypes

Most of the workspace in the Edenvale area is provided in one- to two-story office/flex buildings with surface parking. Exceptions to this rule are few, but include Hitachi's campus (up to four stories) and the Santa Teresa Community Hospital (seven stories, with structured parking).

The Built and Natural Environment

The Edenvale employment area is primarily characterized as a low-rise business park environment. The development pattern features very large parcels or blocks served by wide streets. Integration of land uses is uncommon – office/industrial workspace is seldom mixed with either residential or retail uses in the employment area. However, the employment areas are adjacent to suburban style subdivisions and retail centers.

The freeways bisect this employment area, contributing to the area's lack of cohesiveness as a single place and severely detracting from the area's pedestrian environment. This area does, however, offer attractive views of the nearby hillsides, as well as access to the Coyote Creek Park greenway connecting the area to Coyote Valley to the south and nearly to Downtown San Jose to the north.

Real Estate Performance Indicators

As with other employment areas in the City of San Jose, the Edenvale area currently exhibits significant workspace vacancy. However, much of the existing space does appear to have been constructed relatively recently, and there are signs of ongoing

development activity in the form of the bioscience incubator being constructed east of Highway 101.

Office

The Edenvale employment area falls within office real estate brokers' general definition of the "South San Jose" market area, which also includes employment areas in the Monterey Corridor south of Downtown. According to BT Commercial, the South San Jose office market currently is among the weakest subareas in all of Silicon Valley (see **Table 4.3**). South San Jose has a total supply of only 1.9 million square feet of office space, significantly less than Downtown (8.4 million) or North San Jose (11.0 million, including both EPS's "North First Street" and "North San Jose" areas). Vacancy rates in South San Jose are currently estimated at 27.2 percent, well above that in Downtown San Jose (16.7 percent), North San Jose (13.5 percent), and the overall Silicon Valley average (17.6 percent). A total of 509,000 square feet of office space is currently available in South San Jose, over 80 percent of which is "sublease" space rather than directly available space. South San Jose has by far the largest ratio of sublease to directly available space – only the Cupertino area has as much as 55 percent of its available space as subleases.

South San Jose's current vacancy rates are significantly worse than average, and average office lease rates in the area also fall well below those being achieved elsewhere, at $1.72 per square foot compared to $2.22 in Downtown and $2.10 in Silicon Valley generally. According to CB Richard Ellis, Class A office space in the South San Jose area has also achieved very low lease rates, at $1.75 per square foot compared to $2.49 in Downtown San Jose and $2.15 in Silicon Valley generally.

Over the past several years, BT Commercial indicates that the general "Central Silicon Valley" office market area that includes South San Jose has performed slightly below average for the overall Silicon Valley. Since 2000, the Central Silicon Valley's vacancy rates have been consistently higher than average, and lease rates lower than average. However, Central Silicon Valley has captured the majority of new office development in the Silicon Valley, with 5.8 million of the region's 8.3 million square feet being constructed in Central Silicon Valley.

R&D

The R&D market in the South San Jose area currently shows signs of weakness. According to CB Richard Ellis, South San Jose has a total supply of 9.0 million square feet of R&D space, making it significantly smaller than North San Jose (27.6 million). Moreover, 2.9 million square feet of that space was vacant in the first quarter of 2004, resulting in a 32.6 percent vacancy rate. This vacancy rate is the highest of all Silicon Valley subareas, which average only 21.5 percent vacancy.

However, the lease rates for R&D space in the South San Jose area are equal to the Silicon Valley regional average, at $0.95 per square foot. This South San Jose lease rate actually exceeds those being achieved in North San Jose ($0.85), the region's largest R&D market area.

San Jose captured much of the region's overall construction of R&D space over the past several years. BT Commercial reports that 9.9 million total square feet of R&D space were built in Silicon Valley between 2000 and 2003, and 4.1 million (42 percent) of that space were built in San Jose. This rate of capture is significantly higher than San Jose's overall proportion of Silicon Valley R&D space (27 percent), indicating San Jose's growing competitive strength as an R&D location. As part of the San Jose market, Edenvale stands to gain strength as an R&D location in the future.

Industrial

According to CB Richard Ellis, South San Jose is among the smallest industrial market areas in Silicon Valley, with only 524,000 square feet of leasable industrial space, compared to 12.0 million in North San Jose, 18.8 million in Santa Clara , and 27.9 million in Fremont/Newark. However, industrial vacancy rates in the South San Jose area are well below the regional average, at 2.4 percent compared to 9.3 percent overall. Lease rates are also better than average, at $0.70 per square foot for manufacturing space, compared to $0.59 regionally.

Very little new industrial space has been built in the entire Silicon Valley area in recent years, but the South San Jose vicinity has absorbed a disproportionately large share. BT Commercial reports that the "South/Central San Jose" market area — which also includes the Monterey Corridor and parts of East San Jose — captured 63 percent of all warehouse space and 45 percent of all manufacturing space built in Silicon Valley between 2000 and 2004. These figures combined indicate that South/Central San Jose absorbed 53 percent of the entire Silicon Valley's industrial workspace construction between 2000 and 2004, despite representing only 18 percent of the region's total supply. This construction capture thus represents far more than a pro rata share of recent development, indicating that the general South San Jose area seems to be growing more competitive for industrial development. It is important to note, however, that over the last several years the industrial market has represented a much smaller proportion on overall workspace development in Silicon Valley than has office and R&D development.

Recent and Planned Development

In the last few years, several significant workspace development projects have been completed in the Edenvale area. Among these are the Piercy Business Park (666,000 square feet) and ACT Manufacturing's 197,000-square foot facility, both east of Highway 101. Nortel Networks also built a 187,000-square foot facility south of Highway 85.

In addition, the government-sponsored San Jose Bioscience Incubator and Innovation Center is currently in development in the Edenvale Technology Park, east of Highway 101. This incubator will provide 36,500 square feet of space to be shared among multiple start-up tenants and offered at discounted rents.

Other plans are approved or proposed for the Edenvale area, including a 1.5 million-square foot campus for Equinix, 754,000 square foot facility for Synopsis, and 503,000 square foot facility for Foxconn International. Also approved are an additional 1.2 million square feet of R&D/office workspace in nine business park projects.

The largest proposal in the Edenvale area is for the redevelopment of the Hitachi campus on Cottle Road. Hitachi plans to move some of its workers to Evergreen and redevelop their existing site to achieve a total of up to 3.6 million square feet of industrial, R&D, and office space, plus several thousand homes and up to 460,000 square feet of retail space. Not all of the workspace would be new construction – some already exist and will be intensified to meet the goal of maintaining the same number of jobs as prior to Hitachi's partial relocation.

Transportation Access

The Edenvale area offers direct highway access from Highways 101 and 85. These two freeways then connect to the other main freeways serving San Jose, including Interstate 680 (from Walnut Creek and the Tri-Valley), Interstate 880 (from Oakland), and Interstate 280 (from San Francisco). The Monterey Highway (a.k.a. El Camino Real) also runs through the Edenvale area.

In addition to these means of automobile access, the Edenvale area is served by two VTA stations at Cottle Road and Santa Teresa Boulevard. VTA buses also provide service to the employment area. Caltrain also provides rail service at the Blossom Hill station, although this service is provided during commute hours only.

COMPARISON OF COYOTE VALLEY TO OTHER AREAS

The City of San Jose has established an expectation that sufficient workspace will be developed to provide not fewer than 50,000 jobs in Coyote Valley, excluding any retail and public service jobs. The study commissioned by the City regarding the overall growth projections for employment within the City indicated that the entire City is expected to gain 141,000 net new jobs between 2000 and 2020. Of these 141,000 jobs, roughly 41,000 are expected to be gained in the "civic" and "retail/consumer services" sectors. This leaves a total of 100,000 jobs to be gained in the industry sectors that the City prefers for Coyote Valley.

As discussed above, Coyote Valley is only one of several potential locations for future workspace development in the City of San Jose. And while Coyote Valley has numerous positive attributes that will be attractive to employers and developers, the other

employment locations also have attractive qualities. This section describes Coyote Valley's competitive position on each of several dimensions. A summary of this discussion is provided in **Table 4.4**.

MAJOR EMPLOYERS AND ACTIVITIES

Clusters of large employers can often create a "critical mass" of activity that generates demand for business services (e.g., printing, legal, accounting, etc.) or retail, and also facilitates creative or economic synergies between firms. As a result, employers and developers frequently choose to invest in employment areas where there are major employers.

At present, Coyote Valley has only one major employer – IBM – while each of the competitive areas has several or many. In addition, Coyote Valley has very few jobs compared to the competitive locations, and the jobs located in Coyote Valley represent very little diversity. While other major employers (e.g., Cisco Systems and Xilinx) have expressed interest in Coyote Valley, the area will not realize much benefit from this interest until the workspace development becomes a reality. Companies seeking locations near compatible or even competitive firms will therefore be unlikely to locate in Coyote Valley, if locations in any of the other employment areas are available. For this reason, Coyote Valley is thought to be at a competitive disadvantage to each of the alternative employment locations on this particular dimension at this time.

Once development begins in Coyote Valley, however, its competitive position is likely to improve. The top prospects for workspace include large companies like Cisco, Xilinx, and IBM. These companies are among the largest in San Jose and the Silicon Valley, and have the potential to attract additional employers. In the longer term, therefore, Coyote Valley's competitive disadvantage is expected to diminish with respect to the presence of major employers, but the other areas will likely retain their "critical mass" of employers.

THE BUILT AND NATURAL ENVIRONMENT

Companies choose their locations based on a variety of factors, and each firm may have different priorities. Some companies prioritize the urban environment, seeking conveniences and entertainment options, or proximity to other firms and to housing. Other companies' top priorities are access to freeways for their employees or their products, or a lack of potential conflicts with surrounding uses.

At present, Coyote Valley may offer more advantages to the latter group than the former. Coyote Valley currently offers flat land and few neighbors, making it a potentially attractive location for a relatively traditional suburban business park.

Table 4.4
Competitive Position of San Jose Employment Areas
Coyote Valley Market Analysis

Employment Area	Major Employers and Activities	Built and Natural Environment	Available Land	Available Buildings	Transportation Access
Downtown San Jose	**Strong** -- Includes Adobe, software incubator, convention center and cultural activities	**Strong** -- Silicon Valley's most urban core, with mix of uses and both new and historic features	**Weak** -- only 5 acres of vacant land identified in Downtown core	**Moderate** -- Significant office vacancy, but below regional average. Limited availability of R&D or industrial space.	**Moderate** -- Good highway, light rail, and bus access, and relatively close to airport.
North First Street	**Strong** -- Includes eBay, BEA, Siemens, and other tech and non-tech firms in largest job submarket within San Jose.	**Moderate** -- Limited mixed use (including retail or residential), and limited open space, but increasing densities being achieved.	**Moderate** -- 166 acres of vacant land identified in North First Street.	**Strong** -- High vacancies in office, R&D, and industrial space provides opportunity to attract new businesses.	**Strong** -- Accessible from highways, light rail, bus, and very close to airport.
North San Jose	**Strong** -- Very high proportion in "driving industries," including Cisco, Sony, Lockheed Martin, Novellus, etc.	**Weak** -- Primarily one- and two-story buildings, surface parking, and limited open space, but some mixed use development starting.	**Strong** -- 863 acres of vacant land identified in North San Jose, including much with highway access/visibility.	**Strong** -- High vacancies in office, R&D, and industrial space provides opportunity to attract new businesses.	**Moderate** -- Accessible by Highway 237 and surface streets from other highways, partially served by light rail, relatively close to airport.
Edenvale	**Moderate** -- Smallest competitive job market, but high proportion in "driving industries," including computers/ communications and emerging bioscience.	**Weak** -- Primarily one- and two-story buildings with surface parking, flanked by residential subdivisions.	**Moderate** -- 226 acres of vacant land identified in Edenvale.	**Strong** -- Very high vacancy rates in office and R&D space.	**Moderate** -- Direct freeway access, but on periphery of urbanized area. Also has light rail and Caltrain service. Far from airport.
Coyote Valley (present)	**Weak** -- Only IBM is currently located at Coyote Valley.	**Moderate** -- Very attractive natural scenery and amenities, but no urban development.	**Moderate** -- Over 1,000 acres of land available for workspace development, although infrastructure capacity is limited.	**Weak** -- No vacant building inventory, so all job growth will require workspace development.	**Weak** -- Access from Highway 101, but on periphery of urbanized area. Limited bus service, and no light rail or Caltrain service. Far from airport.
Coyote Valley (future)	**Moderate** -- Planned development for large corporate users will attract additional employers, but other areas already have "critical mass".	**Strong** -- Expected to combine attractive, mixed use urban design with amenities including open space, water features, and hillside views.	**Strong** -- Over 1,000 acres of land available for workspace development, with infrastructure to be improved significantly.	**Moderate** -- Much early development will occur as build-to-suit. Speculative development likely to occur only over longer time.	**Moderate** -- Will have improved light rail and Caltrain access, and marginal improvement to highway access, but still far from airport.

Sources: Economic & Planning Systems, Inc.

Conversely, the current lack of urban amenities will deter prospective tenants seeking a vibrant environment. However, the future Coyote Valley is expected to have little in common with the current Coyote Valley.

In the future, companies seeking the vibrancy of an urban environment will prefer Downtown San Jose or even North First Street for the period prior to the establishment of a community core in Coyote Valley. However, once that core is established, Coyote Valley should be highly competitive for companies seeking a mixed-use, urban experience. Moreover, Coyote Valley is likely to provide natural amenities such as water features, greenways, and hillside views that are superior to those offered in other urban parts of San Jose.

The future Coyote Valley may have difficulty accommodating companies seeking locations in relatively inexpensive buildings similar to those found in traditional business parks. While this type of space is expected to comprise a diminishing proportion of future development activity City-wide and regionally, there will still be numerous firms seeking such an environment for economic or operational reasons. Due to the density requirement in Coyote Valley and the need to maximize land values to finance infrastructure investment, it is possible that relatively little land will be available for low-rise office/flex buildings with surface parking lots. Such restrictions would place Coyote Valley at a competitive disadvantage for attracting these types of firms.

AVAILABLE LAND

By a significant margin, Coyote Valley has more vacant land available for workspace development than any of the other employment areas. In fact, the four other areas discussed here (Downtown San Jose, North First Street, North San Jose, and Edenvale) combined have barely more vacant land than Coyote Valley does. While policies are being formulated to allow the future development of up to 20 million square feet of workspace in the North San Jose and North First Street areas (in addition to the roughly 8 million square feet of capacity still available on underdeveloped parcels in those areas), much of that growth will rely upon the demolition and redevelopment of existing workspace. The availability of appropriately zoned vacant land will be a significant competitive advantage for Coyote Valley, particularly for the attraction of employers or developers seeking large tracts of contiguous land.

It is interesting to note that a study commissioned by the City of San Jose determined that there is sufficient land in the City's employment areas (excluding Coyote Valley) to accommodate all projected workspace growth through 2020, even without the addition of the land in Coyote Valley. To a degree, this fact diminishes Coyote Valley's advantage of land availability, although it is still true that Coyote Valley will offer more opportunities for large tracts of land than other employment areas, where smaller infill development is more possible than large campus-style development.

AVAILABLE BUILDINGS

In the near term, Coyote Valley is at a severe disadvantage for attracting the many companies willing to occupy existing space, because there is no available supply in Coyote Valley. Vacancy rates in the competitive employment areas are very high, and space is available for small and medium-sized businesses in a variety of workspace product types (office, industrial, flex, distribution centers, etc.). Given the relatively low asking prices for workspace in San Jose and the Silicon Valley generally, and the vast amount of available space, it is probable that most businesses seeking to expand or move into San Jose will be able to find affordable existing space more quickly and efficiently than building new workspace in Coyote Valley.

TRANSPORTATION ACCESS

Coyote Valley currently has inferior transportation access by comparison to the alternative employment locations. Automobile access is limited to one freeway (Highway 101) and two surface roads (Monterey Highway and Santa Teresa Boulevard) running in parallel north-south directions, and Bailey Avenue connecting Coyote Valley and the hills to the west. The existing surface streets have reasonable capacity now, but would need to be improved to accommodate the large volume of commute traffic associated with the buildout of workspace for 50,000 jobs. Caltrain and VTA light rail service are not offered, and bus service is limited. Moreover, Coyote Valley is the farthest possible distance of any San Jose employment area from San Jose's airport. Each of the competitive locations has more than one of these transportation factors that are superior to Coyote Valley's.

In the future, however, Coyote Valley is likely to offer more competitive transportation access. Improvements and additions to the Highway 101 interchanges and the automobile circulation within Coyote Valley (e.g., a circumferential parkway) will vastly improve vehicular access, although the area will still be served by only one regional highway. The additions of light rail and Caltrain service will also provide tremendous benefit to the area's accessibility, although Coyote Valley's airport access will remain inferior. The mixed-use plan for Coyote Valley may provide additional benefit to the area's transportation access, as internal commutes (e.g., people who both live and work in Coyote Valley) can reduce the traffic impact on Highway 101 and also prove to be a marketing asset that other employment locations cannot offer.

For the near term, Coyote Valley will be at a severe disadvantage in terms of transportation access. This competitive disadvantage can be mitigated substantially, though probably not completely, as the Coyote Valley plan is developed.

IMPLICATIONS FOR THE COYOTE VALLEY SPECIFIC PLAN

This review of Coyote Valley's competitive position reveals the following:

1. **Coyote Valley faces significant competition for new development over the next several decades.** Several employment areas in San Jose offer advantages that Coyote Valley most likely never will, such as proximity to highways and the airport, or a critical mass of regionally prominent cultural and entertainment venues. These competitive areas also have vacant land available for future development, and are planned for intensification of existing properties as well.

2. **The availability and affordability of workspace in the competing areas will slow the construction of new workspace in Coyote Valley and elsewhere.** Significant amounts of office and R&D space are available in competitive locations, and for most companies these can be occupied more quickly and affordably than the development of new space at Coyote Valley.

3. **The corporations that currently own land in Coyote Valley are not planning to develop significant workspace in the near future.** Cisco, Xilinx, and IBM all own land in Coyote Valley, but only Xilinx has plans to commence even a small amount of workspace construction in the next several years.

4. **The other competing areas are beginning to incorporate the design features envisioned for Coyote Valley.** While most of the competing areas are developed with low-rise office, R&D, and industrial space, there is evidence of more intensive use of land, including taller buildings, structured parking, and mixed use. Also, transit-oriented development is envisioned and becoming a reality along the light rail line north of Downtown San Jose.

5. **To achieve the desired density of development, Coyote Valley will need to develop advantages that alternative areas may not provide.** Accessible and affordable housing, a vibrant mixed-use environment, attractive natural features and urban design, and convenient transit service will vastly improve Coyote Valley's competitive position.

V. PROJECTIONS FOR COYOTE VALLEY WORKSPACE

This section estimates Coyote Valley's ability to capture near-term (through 2010) and long-term (2010 to 2020) employment growth in the City of San Jose. The general conclusion is that Coyote Valley will have difficulty achieving significant workspace development in the near term, but will be adequately competitive for employment growth over the longer term. However, it is unlikely that the goal of 50,000 jobs will be achieved in Coyote Valley by 2020.

CITY-WIDE EMPLOYMENT PROJECTIONS BY PRODUCT TYPE

The City of San Jose commissioned a study of future employment prospects in the City, which was published in 2004. That study concluded that there is likely to be an addition of 141,000 net new jobs in San Jose between 2000 and 2020 (as presented on **Table 2.6**). As shown on **Table 5.1**, this employment growth will generate demand for roughly 50 million square feet of new workspace development by 2020. The largest single product type projected to be in demand is "Low-Rise Office" at 10.8 million square feet, followed by "Retail" at 10.5 million square feet and "Industrial/Warehousing" at 10.1 million square feet. "Institutional/Other" products — which typically include such uses as civic buildings, health care, and hotels — comprise an additional 7.1 million square feet of the demanded space.

Interestingly, the City's commissioned report estimates that "Mid- and High-Rise Office" space (7.1 million square feet) and "R&D/'Heavy Office'" (4.0 million square feet), will comprise the smallest segments of the workspace demand. Even accounting for the recent trends toward increased densities among workspaces, and the plans for considerable intensification of land use in North San Jose and the North First Street area, the future workspaces of San Jose are still expected to be predominantly in low-scale buildings.

Also, demand for new space is expected to be considerably stronger in the long term (2010 through 2020) than in the near term (through 2010). City and ABAG estimates indicate that a total of 19 million square feet of new workspace of all types is likely to be in demand during the 10-year period prior to 2010, but 30 million will be in demand in the following decade. These figures represent a 56 percent increase in the pace of demand or potential absorption from the first decade to the second. It is also interesting to note that demand for "Mid- and High-Rise Offices," "Retail," and "Institutional/Other" workspace is projected to grow more rapidly than average workspace demand, while demand for "R&D/Heavy Office" and "Low-Rise Office" are projected to increase less rapidly than average, and demand for "Industrial/Warehouse" products will increase at roughly the same pace as overall workspace demand.

Table 5.1
City of San Jose Workspace Demand by Industry and Building Type
Coyote Valley Market Analysis

Group/Industry	Square Feet in Demand, 2004-2010						
	Industrial/ Warehouse	R&D/ Heavy Office	Low-Rise Office	Mid&High Rise Office	Retail	Institutional/ Other	Total
Driving Industries	**775,675**	**1,547,053**	**2,933,130**	**841,320**	**2,050**	**12,915**	**6,112,143**
Bioscience	698,400	733,320	1,047,600	0	0	0	2,479,320
Computer & Communications	21,000	22,050	31,500	0	0	0	74,550
Corporate Offices	0	0	11,880	17,820	0	0	29,700
Electronic Component	40,275	15,663	16,110	0	0	0	72,048
Innovation Services	2,250	1,575	6,750	4,050	0	0	14,625
Semiconductors	13,750	9,625	16,500	0	0	0	39,875
Software	0	764,820	1,802,790	819,450	0	0	3,387,060
Visitor	0	0	0	0	2,050	12,915	14,965
Business Support Industries	**2,979,925**	**364,140**	**986,520**	**1,386,225**	**221,200**	**309,680**	**6,247,690**
Building/Construction/Real Estate	29,700	0	62,370	44,550	0	0	136,620
Business Services	129,200	45,220	135,660	135,660	0	0	445,740
Financial Services	0	0	597,240	597,240	221,200	0	1,415,680
Industrial Supplies and Services	489,150	38,045	0	0	0	0	527,195
Misc. Manufacturing	952,000	166,600	0	0	0	0	1,118,600
Consumer Services	155,500	0	93,300	559,800	0	309,680	1,118,280
Transportation/Distribution	1,224,375	114,275	97,950	48,975	0	0	1,485,575
Household Supporting Industries	**195,975**	**0**	**652,898**	**343,913**	**3,527,550**	**2,300,638**	**7,020,973**
Civic	0	0	327,825	218,550	0	1,912,313	2,458,688
Health Care	0	0	266,280	66,570	0	388,325	721,175
Retail/Consumer Services	195,975	0	58,793	58,793	3,527,550	0	3,841,110
Total Demand	**3,951,575**	**1,911,193**	**4,572,548**	**2,571,458**	**3,750,800**	**2,623,233**	**19,380,805**

*Square footage estimates for Financial Services, Industrial Supplies and Services, Miscellaneous Manufacturing, Consumer Services, and Health Care vary from those calculated in Strategic Economics' report.

Sources: Strategic Economics, et al; Economic & Planning Systems, Inc.

Table 5.1 (continued)
City of San Jose Workspace Demand by Industry and Building Type
Coyote Valley Market Analysis

Group/Industry	Square Feet in Demand, 2010-2020						
	Industrial/ Warehouse	R&D/ Heavy Office	Low-Rise Office	Mid&High Rise Office	Retail	Institutional/ Other	Total
Driving Industries	**1,337,550**	**1,398,525**	**4,290,788**	**1,635,500**	**35,150**	**221,445**	**8,918,958**
Bioscience	523,800	419,040	1,134,900	0	0	0	2,077,740
Computer & Communications	270,075	216,060	585,163	0	0	0	1,071,298
Corporate Offices	0	0	169,600	254,400	0	0	424,000
Electronic Component	383,000	275,760	344,700	0	0	0	1,003,460
Innovation Services	19,225	11,535	96,125	76,900	0	0	203,785
Semiconductors	141,450	84,870	330,050	0	0	0	556,370
Software	0	391,260	1,630,250	1,304,200	0	0	3,325,710
Visitor	0	0	0	0	35,150	221,445	256,595
	0	0	0	0	0	0	
Business Support Industries	**4,466,900**	**738,495**	**1,149,863**	**2,232,875**	**643,200**	**371,700**	**9,603,033**
Building/Construction/Real Estate	50,700	0	76,050	76,050	0	0	202,800
Business Services	220,600	66,180	165,450	220,600	0	0	672,830
Financial Services	0	0	566,550	1,133,100	377,700	0	2,077,350
Industrial Supplies and Services	835,200	55,680	0	0	0	0	890,880
Misc. Manufacturing	1,422,400	365,760	0	0	0	0	1,788,160
Consumer Services	265,500	0	132,750	663,750	265,500	371,700	1,699,200
Transportation/Distribution	1,672,500	250,875	209,063	139,375	0	0	2,271,813
Household Supporting Industries	**334,550**	**0**	**773,463**	**644,750**	**6,021,900**	**3,927,788**	**11,702,450**
Civic	0	0	310,925	466,388	0	3,264,713	4,042,025
Health Care	0	0	378,900	94,725	0	663,075	1,136,700
Retail/Consumer Services	334,550	0	83,638	83,638	6,021,900	0	6,523,725
Total Demand	**6,139,000**	**2,137,020**	**6,214,113**	**4,513,125**	**6,700,250**	**4,520,933**	**30,224,440**

*Square footage estimates for Financial Services, Industrial Supplies and Services, Miscellaneous Manufacturing, Consumer Services, and Health Care vary from those calculated in Strategic Economics' report.

Sources: Strategic Economics, et al; Economic & Planning Systems, Inc.

Table 5.1 (continued)
City of San Jose Workspace Demand by Industry and Building Type
Coyote Valley Market Analysis

Group/Industry	Total Square Feet in Demand, 2004-2020													
	Industrial/ Warehouse		R&D/ Heavy Office		Low- Rise Office		Mid- to High- Rise Office		Retail		Institutional/ Other		Total	
	Sq. Ft.	%	Sq. Ft.	%	Sq. Ft.	%	Sq. Ft.	%	Sq. Ft.	%	Sq. Ft.	%	Sq. Ft.	%
Driving Industries	**2,113,225**	**21%**	**2,945,578**	**73%**	**7,223,918**	**67%**	**2,476,820**	**35%**	**37,200**	**0%**	**234,360**	**3%**	**15,031,100**	**30%**
Bioscience	1,222,200	12%	1,152,360	28%	2,182,500	20%	0	0%	0	0%	0	0%	4,557,060	9%
Computer & Communications	291,075	3%	238,110	6%	616,663	6%	0	0%	0	0%	0	0%	1,145,848	2%
Corporate Offices	0	0%	0	0%	181,480	2%	272,220	4%	0	0%	0	0%	453,700	1%
Electronic Component	423,275	4%	291,423	7%	360,810	3%	0	0%	0	0%	0	0%	1,075,508	2%
Innovation Services	21,475	0%	13,110	0%	102,875	1%	80,950	1%	0	0%	0	0%	218,410	0%
Semiconductors	155,200	2%	94,495	2%	346,550	3%	0	0%	0	0%	0	0%	596,245	1%
Software	0	0%	1,156,080	29%	3,433,040	32%	2,123,650	30%	0	0%	0	0%	6,712,770	14%
Visitor	0	0%	0	0%	0	0%	0	0%	37,200	0%	234,360	3%	271,560	1%
Business Support Industries	**7,446,825**	**74%**	**1,102,635**	**27%**	**2,136,383**	**20%**	**3,619,100**	**51%**	**864,400**	**8%**	**681,380**	**10%**	**15,850,723**	**32%**
Building/Construction/Real Estate	80,400	1%	0	0%	138,420	1%	120,600	2%	0	0%	0	0%	339,420	1%
Business Services	349,800	3%	111,400	3%	301,110	3%	356,260	5%	0	0%	0	0%	1,118,570	2%
Financial Services	0	0%	0	0%	1,163,790	11%	1,730,340	24%	598,900	6%	0	0%	3,493,030	7%
Industrial Supplies and Services	1,324,350	13%	93,725	2%	0	0%	0	0%	0	0%	0	0%	1,418,075	3%
Misc. Manufacturing	2,374,400	24%	532,360	13%	0	0%	0	0%	0	0%	0	0%	2,906,760	6%
Consumer Services	421,000	4%	0	0%	226,050	2%	1,223,550	17%	265,500	3%	681,380	10%	2,817,480	6%
Transportation/Distribution	2,896,875	29%	365,150	9%	307,013	3%	188,350	3%	0	0%	0	0%	3,757,388	8%
Household Supporting Industries	**530,525**	**5%**	**0**	**0%**	**1,426,360**	**13%**	**988,663**	**14%**	**9,549,450**	**91%**	**6,228,425**	**87%**	**18,723,424**	**38%**
Civic	0	0%	0	0%	638,750	6%	684,938	10%	0	0%	5,177,025	72%	6,500,713	13%
Health Care	0	0%	0	0%	645,180	6%	161,295	2%	0	0%	1,051,400	15%	1,857,875	4%
Retail/Consumer Services	530,525	5%	0	0%	142,430	1%	142,430	2%	9,549,450	91%	0	0%	10,364,836	21%
Total Demand	**10,090,575**	**100%**	**4,048,213**	**100%**	**10,786,660**	**100%**	**7,084,583**	**100%**	**10,451,050**	**100%**	**7,144,165**	**100%**	**49,605,246**	**100%**

*Square footage estimates for Financial Services, Industrial Supplies and Services, Miscellaneous Manufacturing, Consumer Services, and Health Care vary from those calculated in Strategic Economics' report.

Sources: Strategic Economics, et al; Economic & Planning Systems, Inc.

COYOTE VALLEY PROJECTIONS BY PRODUCT TYPE

City-wide, new workspace development will be in demand to the extent that 1) very little existing workspace is available for sale or lease or 2) available existing workspace does not meet the functional or locational needs of new or expanding businesses. San Jose's total employment peaked in 2001 before declining significantly in 2002 and 2003. The regional employment projections produced by ABAG indicate that San Jose is not likely to experience any net new job growth (over 2001's peak) until at least 2008. The loss of jobs in San Jose has led to high vacancies in all workspace product types.

OFFICE

City-Wide Demand for New Development

In both the near- and long-term, demand for office space in San Jose is expected to be four to five times greater than demand for R&D space, and roughly 80 percent greater than demand for industrial space. As such, the future workspaces of San Jose are likely to be predominantly in office buildings.

As shown on **Table 5.1**, a total of 7.1 million square feet of net new office space (low- to high-rise) is projected to be in demand through 2010 in the City of San Jose, and an additional 10.8 million square feet will be in demand between 2010 and 2020. The demand for new office space through 2020 represents a significant addition to the City's current office supply. The City currently has an estimated 22 million square feet of office space supply. Through 2020, a total of 17.9 million additional square feet of office space are projected to be in demand, which would result in an 80 percent increase in the City's total office supply.

However, very little of this space is likely to be required prior to 2008, given the amount of office space currently available. The City of San Jose market currently has roughly 3.8 million square feet of available office space, including an estimated 2.8 million in mid-to high-rise space.[14] This available space amounts to an overall office vacancy rate of nearly 17 percent, around which vacancies hovered throughout 2003. This amount of vacant office space can accommodate roughly 13,000 new employees. With a variety of office product types available in numerous locations, few small to medium-sized firms will need newly built office space anywhere in the City until this existing supply of office space is re-absorbed.

As office vacancies decrease to more stable levels (typically five to eight percent rather than 17 percent), investors will begin to consider new speculative office development. This will likely occur when overall employment returns to its previous peak, around

[14] See Table 11 from "Towards the Future: Jobs, Land Use and Fiscal Issues in San Jose's Key Employment Areas 2000-2020," Strategic Economics, et al, February 2004.

2008. At that time, new or expanding office tenants will compare the advantages of various employment areas for new locations.

Coyote Valley's Capture Rate

When employment levels return to their previous peaks, Coyote Valley's competitive advantages will be the ample supply of land and the prospect of a future built environment that surpasses most alternative areas for attractiveness and vitality. Downtown San Jose offers an urban environment, but has very little vacant land. The other competitive employment areas are far less urban than Coyote Valley is planned to be, although the North First Street area is planned for eventual intensification and urbanization.

Coyote Valley's key disadvantages will be its distance from other activity areas and its inferior highway accessibility. Coyote Valley is 15 miles from Downtown San Jose, and farther still from the airport. The nearest competitive employment area is Edenvale, just a few miles away, but Edenvale is the smallest and least densely developed of all the competitive employment areas. Given these distances, it will be difficult for Coyote Valley firms to capitalize upon potential synergies with other existing employers in San Jose. These disadvantages will be mitigated to some extent by Coyote Valley's superior proximity to the growing labor forces of southern San Jose, Morgan Hill, Gilroy, San Benito County, and of course the future residents of Coyote Valley. Also, the provision of support services (retail, child care, etc.) at Coyote Valley will improve the area's appeal for many employers and employees.

Capture Rate Without Catalytic Campus Employers

In light of the analysis above it appears likely that, in the absence of a large campus office user, Coyote Valley will be a minor competitor for San Jose's office development for the near-term, absorbing not more than 10 percent of the total new office demand projected for the City by 2010. This level of capture would result in roughly 700,000 square feet of office development by 2010 – enough to accommodate roughly 2,400 office employees. Of these 700,000 square feet, it is likely that demand for mid- to high-rise buildings will comprise roughly 250,000 square feet (most likely mid-rise), while demand for low-rise buildings would yield 450,000 square feet (see **Table 5.2**).

This amount of near-term development (700,000 square feet) would be just less than half of the aggregate amount now being discussed by Cisco (500,000), Xilinx (698,000), and IBM (400,000) for their own properties. Given that none of these companies, nor the Sobrato Development Company, has plans to proceed with much development in the next few years, and also that the current supply of available existing space is so great, a projection of 700,000 square feet of office space by 2010 does not seem overly pessimistic. Even with highly talented developers and motivated landowners in Coyote Valley, achieving more than this amount of office space by 2010 will be highly challenging.

Table 5.2
Estimated Workspace Capture Rate for Coyote Valley
Coyote Valley Market Analysis

Scenario	2004-2010 City-wide Sq. Ft.	2004-2010 Coyote Valley Capture	2004-2010 Coyote Valley Sq. Ft.	2004-2010 Coyote Valley Jobs	2010-2020 City-wide Sq. Ft.	2010-2020 Coyote Valley Capture	2010-2020 Coyote Valley Sq. Ft.	2010-2020 Coyote Valley Jobs	2004-2020 City-wide Sq. Ft.	2004-2020 Coyote Valley Capture	2004-2020 Coyote Valley Sq. Ft.	2004-2020 Coyote Valley Jobs
EPS Capture Rate Estimates												
Industrial/Warehouse	3,951,575	10%	395,158	790	6,139,000	15%	920,850	1,842	10,090,575	13%	1,316,008	2,632
R&D/Heavy Office	1,911,193	20%	382,239	1,092	2,137,020	25%	534,255	1,781	4,048,213	23%	916,494	2,873
Low-Rise Office	4,572,548	10%	457,255	1,524	6,214,113	20%	1,242,823	4,971	10,786,660	16%	1,700,077	6,495
Mid- to High-Rise Office	2,571,458	10%	257,146	857	4,513,125	33%	1,489,331	5,957	7,084,583	25%	1,746,477	6,814
Total	*13,006,773*	*11%*	*1,491,797*	*4,264*	*19,003,258*	*22%*	*4,187,259*	*14,551*	*32,010,030*	*18%*	*5,679,055*	*18,815*
50% Capture Rate Scenario												
Industrial/Warehouse	3,951,575	50%	1,975,788	3,952	6,139,000	50%	3,069,500	6,139	10,090,575	50%	5,045,288	10,091
R&D/Heavy Office	1,911,193	50%	955,596	2,730	2,137,020	50%	1,068,510	3,562	4,048,213	50%	2,024,106	6,292
Low-Rise Office	4,572,548	50%	2,286,274	7,621	6,214,113	50%	3,107,056	12,428	10,786,660	50%	5,393,330	20,049
Mid- to High-Rise Office	2,571,458	50%	1,285,729	4,286	4,513,125	50%	2,256,563	9,026	7,084,583	50%	3,542,291	13,312
Total	*13,006,773*	*50%*	*6,503,386*	*18,589*	*19,003,258*	*50%*	*9,501,629*	*31,155*	*32,010,030*	*50%*	*16,005,015*	*49,744*

Sources: Strategic Economics, et al; Economic & Planning Systems, Inc.

As the Coyote Valley area takes shape and land and building availability decreases in other employment areas, Coyote Valley's capture of office development may increase to as much as 25 percent of the overall City demand between 2010 and 2020. This capture rate would result in an additional 2.7 million square feet of office space in Coyote Valley, bringing the total number of office employees to roughly 13,300 in a total of 3.4 million square feet.

Of the 2.7 million square feet total office capture between 2010 and 2020, pro rata percentages based on City-wide projections suggest that low-rise office may constitute roughly 60 percent (1.6 million square feet) of the demand in Coyote Valley, while mid- to high-rise office demand may comprise 40 percent (1.1 million square feet). However, given that Downtown San Jose has very little available land, and that the other competitive employment areas are predominantly low-scale and would require significant redevelopment of existing low-scale buildings, it is possible that Coyote Valley could capture more than a pro rata share of mid- to high-rise development. Unlike the City as a whole, EPS estimates that Coyote Valley office space may be slightly more likely to be mid- to high-rise between 2010 and 2020, perhaps resulting in 1.5 million square feet of mid- to high-rise development (representing one-third of the total City demand), and 1.2 million square feet of low-rise office (representing 20 percent of the total City demand).

Capture Rate with Catalytic Campus Employers

As noted in the discussions of "Recent and Planned Development" within each competitive employment area, numerous campus development projects have been completed or proposed in San Jose in recent years, including Cisco's campuses in the North San Jose area, eBay and BEA's campuses in the North First Street area, Palm's proposed campus in North San Jose, Equinix's proposed campus in the Edenvale area, and Adobe's high-rise campus in Downtown San Jose. Given the previous interest expressed in Coyote Valley by large campus users, and the fact that several major corporations actually own land in Coyote Valley, it is probable that Coyote Valley will attract one or more large office tenants by 2020 and possibly even by 2010, although indications for major development that soon are less positive.

If a large campus user can be attracted to Coyote Valley, such as Cisco Systems, Xilinx, or a similar tenant, Coyote Valley's capture rate may increase substantially. Such a user can bring thousands (even tens of thousands) of jobs themselves, and can also generate the synergies and activity levels that will make the area attractive to other users. However, because campus development is driven by individual firms' growth and financial position rather than overall market trends, it is very difficult to project the potential for Coyote Valley to attract a large campus office user of a specific size at a specific time. Moreover, the amount of development projected through 2020 represents a relatively aggressive capture rate (25 percent of the City's total demand between 2010 and 2020), and certainly would require the development of office space for large

corporations rather than relying entirely on speculative development for smaller office tenants. To be conservative, EPS has not assumed any additional absorption associated with campus office users.

R&D/HEAVY OFFICE

City-Wide Demand for New Development

As shown on **Table 5.1**, a total of 1.9 million square feet of net new "R&D/Heavy Office" is projected to be in demand through 2010, and 4.0 million square feet total through 2020. Unlike office space, the amount of net new R&D space projected to be in demand would represent only a slight increase to the overall R&D supply in San Jose. There currently are an estimated 47 million square feet of R&D space in San Jose. The 4.0 million square feet of total net new demand through 2020 represent less than a 10 percent increase to the overall supply of R&D space in the City.

As with office space, very little of this R&D space is likely to be required prior to 2008, given the amount of space currently available. The City of San Jose market currently has roughly 12 million square feet of available R&D space, amounting to an overall R&D vacancy rate of 25 percent. R&D vacancy rates have hovered at this level throughout 2003. This amount of vacant R&D space can accommodate roughly 34,000 new employees. Even accounting for the estimated 1.8 million square feet of existing R&D space that may be functionally obsolete and therefore not truly in the competitive market, vacancies still exceed 10 million square feet or 20 percent of the overall supply.

If vacancies decrease to more stable levels (typically five to eight percent rather than 25 percent), employers and investors will begin to consider new R&D development. Given the vast amount of R&D space available, it is unlikely that R&D vacancies will return to reasonable levels before overall employment returns to its previous peak, which is expected to occur around 2008. However, given that projected new demand represents a relatively small amount of the existing supply (less than 10 percent), it would not be impossible for existing supply to meet all of the demand through 2020.

At that time, new or expanding R&D tenants will compare the advantages of various employment areas for new locations. As with office space, Coyote Valley's competitive advantages for R&D development will be the ample supply of land and the prospect of a future built environment that surpasses most alternative areas for attractiveness and vitality. Coyote Valley's key disadvantages will be its distance from other activity areas and its inferior accessibility from all but one of the region's highways.

Coyote Valley's Capture Rate

In the near-term, Coyote Valley may be a slightly stronger competitor for San Jose's R&D development than for office space. Given the land ownership interests of some of the Silicon Valley's largest technology firms (IBM, Cisco, and Xilinx), Coyote Valley is likely to absorb up to 20 percent of the total new R&D demand projected for the City by

2010. This level of capture would result in roughly 380,000 square feet of R&D development by 2010 – enough to accommodate roughly 1,100 R&D employees (see **Table 5.2**).

This amount of R&D development, combined with the projection for office space, would result in roughly 1.1 million square feet of workspace being developed in Coyote Valley through 2010. Given that the three large technology corporations with land interests in Coyote Valley are considering the long-term development of only 1.6 million square feet of office/R&D space for their own use, and none has plans to commence development in the next several years, this overall office/R&D workspace capture seems reasonable if not optimistic.

As the Coyote Valley area takes shape and R&D land availability decreases in other employment areas, Coyote Valley's capture of R&D development may increase to 25 percent of the overall City demand between 2010 and 2020. This capture rate would result in an additional 535,000 square feet of R&D space in Coyote Valley, bringing the total number of R&D employees to roughly 2,900 in a total of 915,000 square feet.

As with office space, EPS has not increased our projected capture rate for Coyote Valley to account for the potential development of an additional large R&D campus for an individual tenant. Because campus development is driven by individual firms' growth and financial position rather than overall market trends, it is very difficult to project the potential for Coyote Valley to attract a large campus R&D user of a specific size at a specific time. Also, the total projected demand for R&D space in the City is so low (4.0 million square feet through 2020) that the projection of 915,000 square feet of R&D at Coyote Valley represents almost 25 percent of the entire City-wide demand. EPS believes these projections imply the development of at least one relatively large (if not "Cisco-sized") R&D campus, in addition to some smaller or multi-tenant R&D space.

INDUSTRIAL/WAREHOUSE

City-Wide Demand for New Development

As shown on **Table 5.1**, a total of 4.0 million square feet of net new "Industrial/ Warehouse" workspace is projected to be in demand through 2010, and 10.1 million square feet total through 2020. While the majority of this industrial/warehouse demand projection is likely to be occupied by transportation/distribution firms and miscellaneous manufacturers, a sizable amount is expected to be demanded by "driving industry" firms, particularly in the bioscience, computer, and electronics sectors.

The amount of net new industrial space projected to be in demand would represent a moderate increase to the overall industrial supply in San Jose, unlike office space (which has a major increase) and R&D (which has a minor increase). There currently is an estimated 40 million square feet of industrial/warehouse space in San Jose.

The 10.1 million square feet of total net new demand through 2020 would represent a 25 percent increase to the overall supply of industrial/ warehouse space in the City.

While industrial/warehouse space currently has a lower vacancy rate than either office or R&D space, the City of San Jose market currently has roughly 5.5 million square feet of available industrial/warehouse space. This amount of vacant industrial/warehouse space can accommodate roughly 11,000 new employees. Even accounting for the estimated 900,000 square feet of existing industrial/warehouse space that may be functionally obsolete and therefore not truly in the competitive market, vacancies still exceed 4.5 million square feet or 11 percent of the overall supply.

When vacancies decrease to more stable levels (typically 5 to 8 percent rather than 11 percent), employers and investors will begin to consider new industrial/ warehouse development. New development of industrial/warehouse space is likely to occur prior to development of office or R&D space because current vacancy rates are relatively close to stabilized vacancies. For this reason, it is likely that some development of industrial/warehouse space can occur prior to 2008.

Coyote Valley's Capture Rate

New or expanding industrial/warehouse tenants will compare the advantages of various employment areas for new locations. Coyote Valley's key competitive advantage for industrial/warehouse development will be its ample supply of land, which in current market conditions is likely to be priced below land in many other employment areas (e.g., North San Jose). The prospect of an attractive and vital future urban environment is typically less critical to an industrial or warehouse tenant than to an office or R&D tenant, because industrial/warehouse buildings often require large tracts of land and setbacks for parking and truck loading and have limited views of their environment due to perimeter screening or lack of windows. However, certain industrial tenants may have workforces similar to R&D tenants. As noted on **Table 5.1**, much of the industrial space projected for the future in San Jose is likely to be occupied by bioscience, computer, and electronics firms. These firms are likely to have highly educated, well-paid employees who may demand work environments that are superior to typical industrial parks, and Coyote Valley can provide such an environment.

Coyote Valley's key disadvantage for industrial/warehouse space will be the Coyote Valley Specific Plan's limited allowance of low-intensity employment operations. To accommodate 50,000 jobs on less than 1,500 acres, the Specific Plan must achieve high average workspace densities. Industrial and warehouse space typically require 500 or more square feet of space per employee, compared to 350 or 300 for R&D and office space, respectively. Moreover, industrial and warehouse development is highly unlikely to be accommodated in buildings taller than one or two stories, while office and R&D functions can occur in mid-rise or even high-rise buildings. The Coyote Valley Specific Plan simply cannot attain its goal of 50,000 total jobs if more than a small amount of land is used for industrial/warehouse functions.

In addition, Coyote Valley may suffer from its distance from other activity areas and its inferior accessibility from all but one of the region's highways. Industrial/warehouse tenants typically require easy access to regional highways due to their reliance on freight trucking, and also like to locate within relatively convenient proximity to the producers of their inputs or freight. Coyote Valley's most proximate competitive workspace area—Edenvale—offers these advantages and has over 200 acres of vacant land still available for industrial/warehouse development.

Due to the availability of space and land in more regionally accessible locations, Coyote Valley will be a minor competitor for San Jose's industrial/warehouse development for the near term, absorbing as little as 10 percent of the total new demand projected for the City by 2010. This level of capture would result in roughly 400,000 square feet of industrial/warehouse development by 2010 – enough to accommodate roughly 800 employees (see **Table 5.2**).

As industrial/warehouse land availability decreases in other employment areas and Coyote Valley's regional accessibility improves, Coyote Valley's capture of industrial/warehouse development may increase, but is still not likely to exceed 15 percent of the overall City demand between 2010 and 2020. This capture rate would result in an additional 920,000 square feet of industrial/warehouse space in Coyote Valley, bringing the total number of industrial/warehouse employees to roughly 2,600 in a total of 1.3 million square feet.

Given the type of urban environment envisioned for Coyote Valley, it is likely that the area will attract industrial tenants that function more like R&D than like warehousing. As such, EPS anticipates that bioscience, electronics, and computer industries are likely to locate at Coyote Valley, rather than distribution centers and heavy industry.

IMPLICATIONS FOR THE COYOTE VALLEY SPECIFIC PLAN

Table 5.2 summarizes EPS's assessments of Coyote Valley's potential for workspace development through 2020. As shown on that table, there is potential for Coyote Valley to capture roughly 1.5 million total square feet of workspace through 2010, and an additional 4.2 million square feet through 2020. Office space (particularly mid- to high-rise space) represents the largest overall potential market niche for Coyote Valley, and R&D/heavy office space represents the smallest niche. Demand for mid- to high-rise office space is most likely to improve during the buildout of the Coyote Valley community, while demand for industrial/warehouse space will be least improved by that buildout.

EPS estimates that, in the absence of an unexpectedly large campus office or R&D user, roughly 4,300 jobs can be gained at Coyote Valley by 2010, and an additional 14,500 total jobs by 2020, for an overall total of 18,800 jobs. Clearly, this number does not reach the goal of 50,000 total jobs at Coyote Valley, so workspace development would be assumed to continue beyond 2020. However, it is likely that the preliminary threshold of 5,000

jobs could be achieved by not later than 2012 (or sooner if a major campus user is attracted), which would allow for the development of residential and retail uses in Coyote Valley.

It is interesting to note that Coyote Valley would need to capture 50 percent of projected demand for new office, R&D, and industrial/warehouse workspace in the City of San Jose to accommodate 50,000 workers by 2020. EPS believes this capture rate is far too optimistic, even with the potential for a campus user, and therefore concludes that the development of the required workspace will continue well beyond 2020, perhaps even for another 10 to 20 years.

VI. COYOTE VALLEY PROGRAM CONSIDERATIONS

This chapter considers the implications of the previous analyses for the land use program and implementation strategy of the Coyote Valley Specific Plan.

MIX OF WORKSPACE TYPES

Given the required job count (50,000+), environmental needs and goals (open space, water facilities, etc.), and vision for an urban quality at Coyote Valley, it is expected that the majority of workspace in Coyote Valley will be of relatively high density, such as mid- to high-rise office buildings and multi-story R&D/heavy office space. In the near term (through 2010), Coyote Valley is likely to have difficulty attracting a significant amount of this higher density development.

As discussed in **Chapter V** and shown on **Table 5.2**, EPS has projected that Coyote Valley will be able to attract roughly 5.7 million square feet of total workspace development through 2020. Of this total amount, 1.7 million square feet (31 percent) may potentially be captured in mid- to high-rise offices. Another 1.7 million square feet (30 percent) may be located in low-rise offices. Industrial space may account for another 1.3 million square feet (23 percent) of space, and R&D space may represent only 900,000 square feet (16 percent) of all workspace in Coyote Valley.

Given these ratios, it is clear that most of the marketable workspace in Coyote Valley for the foreseeable future will be in low-rise buildings (i.e., not more than four stories). While this market analysis indicates that taller buildings will become increasingly marketable over time and comprise an increasingly large proportion of the overall workspace program, heavy reliance on these taller buildings to provide the workspace desired at Coyote Valley will slow the overall rate of absorption significantly and limit the financial feasibility of the overall development.

For a long-term buildout plan, EPS recommends that not more than 40 percent of all jobs be assumed to occupy mid- to high-rise office buildings in Coyote Valley, and that office jobs represent not more than 70 percent of the total assumed employment (see **Table 6.1**). In addition, EPS recommends that the buildout plan accommodate a higher percentage of R&D jobs than is expected to be achievable through 2020 (20 percent at buildout versus 15 percent through 2020), because R&D functions are one of the core competencies the Silicon Valley provides and the modest R&D projections for the near- and mid-term reflect a significant amount of currently vacant space that is likely to be re-absorbed in the long-term. Finally, EPS recommends that at least 10 percent of jobs be assumed to be in one- and two-story industrial-style buildings, with the jobs in these buildings most likely to be in the biosciences and other high technology industries rather than traditional manufacturing or warehousing.

Table 6.1
Recommended Buildout Distribution of Workspace Types for Coyote Valley
Coyote Valley Market Analysis

Workspace Type	Estimated Workspace Distribution 2004-2020 (1)				Long-Term Buildout Recommendations			
	Total Jobs	*Percent of Total Jobs*	*Square Feet*	*Percent of Total SqFt*	*Total Jobs*	*Percent of Total Jobs*	*Square Feet*	*Percent of Total SqFt*
Industrial/Warehouse	2,632	14%	1,316,008	23%	5,000	10%	2,500,000	18%
R&D/Heavy Office	2,873	15%	916,494	16%	10,000	20%	3,000,000	21%
Low-Rise Office	6,495	35%	1,700,077	30%	15,000	30%	3,750,000	26%
Mid- to High-Rise Office	6,814	36%	1,746,477	31%	20,000	40%	5,000,000	35%
Total	*18,815*	*100%*	*5,679,055*	*100%*	*50,000*	*100%*	*14,250,000*	*100%*

(1) See Table 5.2 for additional detail

Sources: Economic & Planning Systems, Inc.

LOCATIONS

This market assessment indicates that mixed-use urban locations achieve premiums for office rents, but that there is likely to be demand for suburban-style office campuses as well as the more urban office types. R&D and industrial tenants are often less physically compatible with urban environments, although they still benefit from proximity to retail services and other amenities. Office and R&D tenants tend to have higher density employment (i.e., lower square feet per employee) than industrial users, and therefore are more able to benefit from and contribute to transit ridership. Moreover, industrial tenants in particular tend to be attracted to locations near highway infrastructure to facilitate their logistics needs.

EPS recommends that the vast majority of the mid- to high-rise office space be programmed in an urban, mixed-use environment such as a "town center." While some individual tenants may choose to locate in mid-rise buildings outside the urban core, it is most likely that those less urban locations will be sought by users of lower-scale buildings.

Low-rise office and R&D buildings can be distributed more evenly throughout the Coyote Valley area, including some on the periphery of the urban core, some along the transit line outside of the urban core, others proximate to Highway 101, and still others nestled into the hills that define the western boundaries of the Coyote Valley planning area (similar to the location of IBM's existing campus).

Industrial buildings should be planned most accessibly to Highway 101, whether they are located between Highway 101 and the Monterey Highway or located elsewhere in the plan but within easy reach of a Highway 101 interchange.

AMENITIES

As noted above, many employers and employees benefit substantially from locations within or adjacent to mixed-use urban environments with a variety of retail, dining, and service options. Many companies also appreciate access to natural features including hiking/biking/running trails, and water features such as lakes and streams, in addition to views of and access to parks and passive open space. Companies also benefit from convenient transit service, which provides options for their employees' commutes, as well as proximate housing within price points affordable to their employees. To the extent that the Coyote Valley Specific Plan provides these amenities — as it is currently envisioned to do — Coyote Valley will be a strongly competitive location for workspace in San Jose and the Silicon Valley.

In addition to these amenities, the Coyote Valley Specific Plan should also provide for the inclusion of lodging facilities within the area. Many employers are increasingly relying on employees or consultants from out-of-town who need temporary housing

whether for one night or several weeks or months. Also, it is likely that much of the employment in Coyote Valley will be provided by worldwide leaders in their industries, attracting business travelers as well as conference activities. EPS recommends that the Coyote Valley Specific Plan provide for a business-class hotel in the urban core, and extended-stay lodging facilities in the urban core and/or nearer the Highway 101 interchanges.

PHASING

The trends of volatility over the past ten years are consistent with a general pattern of economic booms and busts that have borne out over most geographical areas over decades and even centuries. In Silicon Valley, the ongoing trend line continues to show significant growth rather than decline, as is evident through long-term statistics on population, employment, and regional production. Due to its massive size, the development of Coyote Valley will occur over many years, during which there will be both "boom" and "bust" periods. The Specific Plan should provide sufficient flexibility both in use and in phasing expectations to accommodate these inevitable economic cycles.

That said, EPS believes the most marketable workspace development in Coyote Valley will be in low-rise buildings for the near-term. As shown on **Table 5.2**, mid-to high-rise office buildings represent less than 20 percent of the workspace estimated to be achievable through 2010, and only 31 percent of the total workspace likely to be achieved by 2020. The remainder, therefore, is likely to be in low-rise office and R&D buildings (up to four stories) and industrial space (one or two stories).

Given these considerations, as well as the benefits of developing retail space only when a local market of employees and residents is in place, EPS recommends that the Coyote Valley Specific Plan not rely on the development of the mixed-use urban core as a leading effort for Coyote Valley. The uses envisioned within the urban core will become more and more marketable as the base of local consumers grows, as land becomes more scarce in other areas of Silicon Valley and San Jose, and as the amenities and services such as Caltrain and the local transit system mature.

A more specific phasing plan will be developed for the entire Coyote Valley area (including the residential and retail development) later in the planning process.

IMPLICATIONS FOR THE COYOTE VALLEY SPECIFIC PLAN

Based on the findings of this market analysis, EPS makes the following recommendations for the workspace in the Coyote Valley Specific Plan:

1. **The Specific Plan should not be overly aggressive in its assumptions of workspace density.** While mid- to high-rise office development is likely to be increasingly marketable over time, the vast majority of both jobs and workspace now and in the future are likely to be located in low-rise buildings of not more than four stories.

2. **The Specific Plan should assume most of its high-density workspace within the urban core, allowing for low-rise development in the peripheral areas.** The mid- to high-density office space should be primarily located in the urban core, while low-rise office and R&D space should be distributed throughout the plan, including along the transit line and adjacent to the hillsides. Industrial space should be planned with easy access to Highway 101.

3. **The Specific Plan should ensure the development of a mixed-use core with transit access, retail and services, and open space features.** This type of environment should command premium workspace rents, and is also necessary to attract any significant amount of high-density office development.

4. **The Specific Plan should not rely too heavily on the development of the urban core as a near-term "place-making" effort**. The uses in the urban core, including the workspace, the retail, and the housing, are all likely to be more marketable as the remainder of Coyote Valley is built out, rather than before.